

04279490 LAKE BOMOSEEN AT OUTLET, NEAR FAIR HAVEN, VT

LOCATION.--Lat 43° 36'18", long 73° 14'01", Rutland County, Hydrologic Unit 02010001, on left bank upstream face of Dam at outlet, 100 ft upstream of State Highway 4A, 100 ft west of State Highway 4A and School Street intersection in Hydeville, 0.6 mi upstream of mouth on Castleton River, and 1.8 mi northeast of State Highways 4A and 22A intersection in Fair Haven.

DRAINAGE AREA.--37.5 mi².

PERIOD OF RECORD.--Elevation: October 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 410.46 ft, Apr. 4; minimum elevation, 409.53 ft, Feb. 19.

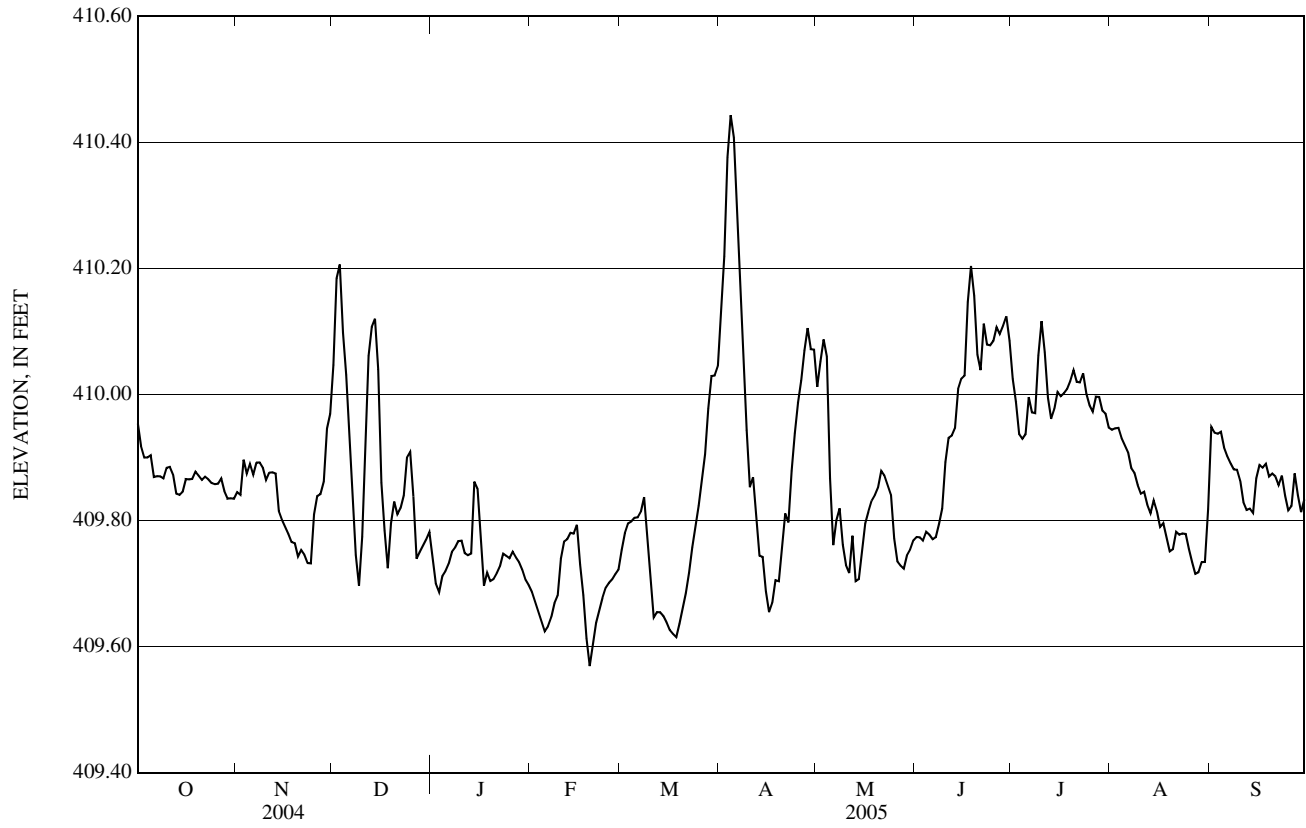
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 409.95 | 409.85 | 410.05 | 409.74 | 409.69 | 409.75 | 410.13 | 410.01 | 409.77 | 410.02 | 409.94 | 409.95 |
| 2 | 409.92 | 409.84 | 410.18 | 409.70 | 409.67 | 409.78 | 410.22 | 410.05 | 409.77 | 409.99 | 409.95 | 409.94 |
| 3 | 409.90 | 409.90 | 410.21 | 409.69 | 409.66 | 409.80 | 410.38 | 410.09 | 409.77 | 409.94 | 409.95 | 409.94 |
| 4 | 409.90 | 409.87 | 410.10 | 409.71 | 409.64 | 409.80 | 410.44 | 410.06 | 409.78 | 409.93 | 409.93 | 409.94 |
| 5 | 409.90 | 409.89 | 410.03 | 409.72 | 409.62 | 409.80 | 410.41 | 409.87 | 409.78 | 409.94 | 409.92 | 409.92 |
| 6 | 409.87 | 409.87 | 409.92 | 409.73 | 409.63 | 409.81 | 410.32 | 409.76 | 409.77 | 410.00 | 409.91 | 409.90 |
| 7 | 409.87 | 409.89 | 409.82 | 409.75 | 409.65 | 409.81 | 410.20 | 409.80 | 409.77 | 409.97 | 409.88 | 409.89 |
| 8 | 409.87 | 409.89 | 409.75 | 409.76 | 409.67 | 409.84 | 410.08 | 409.82 | 409.79 | 409.97 | 409.88 | 409.88 |
| 9 | 409.87 | 409.88 | 409.70 | 409.77 | 409.68 | 409.78 | 409.94 | 409.76 | 409.82 | 410.06 | 409.86 | 409.88 |
| 10 | 409.88 | 409.86 | 409.77 | 409.77 | 409.74 | 409.71 | 409.85 | 409.73 | 409.89 | 410.12 | 409.84 | 409.86 |
| 11 | 409.89 | 409.88 | 409.93 | 409.75 | 409.77 | 409.65 | 409.87 | 409.72 | 409.93 | 410.07 | 409.85 | 409.83 |
| 12 | 409.87 | 409.88 | 410.06 | 409.75 | 409.77 | 409.65 | 409.81 | 409.78 | 409.93 | 409.99 | 409.83 | 409.82 |
| 13 | 409.84 | 409.87 | 410.11 | 409.75 | 409.78 | 409.65 | 409.74 | 409.70 | 409.95 | 409.96 | 409.81 | 409.82 |
| 14 | 409.84 | 409.82 | 410.12 | 409.86 | 409.78 | 409.65 | 409.74 | 409.71 | 410.01 | 409.98 | 409.83 | 409.81 |
| 15 | 409.85 | 409.80 | e410.04 | 409.85 | 409.79 | 409.64 | 409.69 | 409.75 | 410.03 | 410.00 | 409.81 | 409.87 |
| 16 | 409.87 | 409.79 | e409.86 | 409.77 | 409.73 | 409.63 | 409.65 | 409.80 | 410.03 | 410.00 | 409.79 | 409.89 |
| 17 | 409.87 | 409.78 | 409.78 | 409.70 | 409.68 | 409.62 | 409.67 | 409.81 | 410.15 | 410.00 | 409.80 | 409.88 |
| 18 | 409.87 | 409.77 | 409.72 | 409.72 | 409.61 | 409.62 | 409.71 | 409.83 | 410.20 | 410.01 | 409.77 | 409.89 |
| 19 | 409.88 | 409.76 | 409.80 | 409.70 | 409.57 | 409.64 | 409.70 | 409.84 | 410.16 | 410.02 | 409.75 | 409.87 |
| 20 | 409.87 | 409.74 | e409.83 | 409.71 | 409.60 | 409.66 | 409.75 | 409.85 | 410.06 | 410.04 | 409.75 | 409.87 |
| 21 | 409.86 | 409.75 | e409.81 | 409.72 | 409.64 | 409.69 | 409.81 | 409.88 | 410.04 | 410.02 | 409.78 | 409.87 |
| 22 | 409.87 | 409.75 | e409.82 | 409.73 | 409.66 | 409.72 | 409.80 | 409.87 | 410.11 | 410.02 | 409.78 | 409.86 |
| 23 | 409.87 | 409.73 | e409.84 | 409.75 | 409.68 | 409.76 | 409.88 | 409.86 | 410.08 | 410.03 | 409.78 | 409.87 |
| 24 | 409.86 | 409.73 | 409.90 | 409.74 | 409.69 | 409.79 | 409.94 | 409.84 | 410.08 | 410.00 | 409.78 | 409.84 |
| 25 | 409.86 | 409.81 | 409.91 | 409.74 | 409.70 | 409.82 | 409.99 | 409.77 | 410.09 | 409.98 | 409.75 | 409.82 |
| 26 | 409.86 | 409.84 | 409.84 | 409.75 | 409.71 | 409.86 | 410.02 | 409.74 | 410.11 | 409.97 | 409.73 | 409.82 |
| 27 | 409.87 | 409.84 | 409.74 | 409.74 | 409.71 | 409.91 | 410.07 | 409.73 | 410.10 | 410.00 | 409.72 | 409.87 |
| 28 | 409.85 | 409.86 | 409.75 | 409.73 | 409.72 | 409.98 | 410.11 | 409.72 | 410.11 | 410.00 | 409.72 | 409.84 |
| 29 | 409.83 | 409.95 | e409.76 | 409.72 | --- | 410.03 | 410.07 | 409.74 | 410.12 | 409.97 | 409.73 | 409.81 |
| 30 | 409.84 | 409.97 | e409.77 | 409.71 | --- | 410.03 | 410.07 | 409.75 | 410.08 | 409.97 | 409.73 | 409.83 |
| 31 | 409.83 | --- | 409.78 | 409.70 | --- | 410.05 | --- | 409.77 | --- | 409.95 | 409.82 | --- |
| MEAN | 409.87 | 409.84 | 409.89 | 409.74 | 409.69 | 409.77 | 409.97 | 409.82 | 409.98 | 410.00 | 409.82 | 409.87 |
| MAX | 409.95 | 409.97 | 410.21 | 409.86 | 409.79 | 410.05 | 410.44 | 410.09 | 410.20 | 410.12 | 409.95 | 409.95 |
| MIN | 409.83 | 409.73 | 409.70 | 409.69 | 409.57 | 409.62 | 409.65 | 409.70 | 409.77 | 409.93 | 409.72 | 409.81 |
| CAL YR | 2004 | MEAN | 409.88 | MAX | 410.37 | MIN | 409.57 | | | | | |
| WTR YR | 2005 | MEAN | 409.85 | MAX | 410.44 | MIN | 409.57 | | | | | |

e Estimated

ST.LAWRENCE RIVER BASIN

04279490 LAKE BOMOSEEN AT OUTLET, NEAR FAIR HAVEN, VT—Continued



04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43° 37'27", long 73° 18'43", Rutland County, Hydrologic Unit 02010001, on right bank, 0.4 mi downstream from Carver Falls and Dam, 2.0 mi upstream from Hubbardton River, 3.0 mi northwest of Town Hall in Fair Haven, and 6.6 mi northeast of Whitehall, NY.

DRAINAGE AREA.--187 mi².

PERIOD OF RECORD.--Discharge records: October 1928 to current year.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for March 31 to May 5, which are fair, and those for estimated daily discharges, which are poor. Flow regulated by power plant upstream and Lake Bomoseen.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s, July 20, 1945, gage height, 24.36 ft, from high-water mark in well, from rating curve extended above 2,600 ft³/s on basis of computations of flow over dam at gage heights 16.10 ft, 21.40 ft, and 24.36 ft; minimum daily discharge, 2.1 ft³/s, August 8, 1965, September 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s (revised) and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Apr 3 | 0115 | *2,570 | *11.97 | No other peak greater than base discharge. | | | |

Minimum daily discharge, 15 ft³/s, Aug. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|-------|-------|--------|--------|-------|-------|-------|------|-------|
| 1 | 142 | 58 | 544 | e275 | e170 | e116 | 1,760 | 521 | 78 | 177 | 56 | 184 |
| 2 | 137 | 53 | 1,020 | e270 | e160 | e109 | 1,900 | 321 | 84 | 173 | 71 | 93 |
| 3 | 120 | 69 | 611 | e285 | e150 | e104 | 2,420 | 285 | 82 | 141 | 54 | 67 |
| 4 | 81 | 59 | 615 | e263 | e140 | e103 | 1,920 | 284 | 71 | 76 | 46 | 54 |
| 5 | 72 | 81 | 562 | e242 | e130 | e101 | 1,460 | 472 | 60 | 67 | 41 | 36 |
| 6 | 74 | 66 | 490 | 222 | e130 | e98 | 1,200 | 425 | 62 | 75 | 36 | 27 |
| 7 | 68 | 64 | 450 | 220 | e130 | e95 | 1,050 | 241 | 114 | 77 | 33 | 31 |
| 8 | 65 | 67 | 552 | 205 | e125 | e142 | 1,010 | 227 | 96 | 65 | 30 | 32 |
| 9 | 62 | 60 | 521 | 196 | e125 | e175 | 876 | 213 | 104 | 159 | 29 | 28 |
| 10 | 61 | 49 | 362 | 193 | e150 | e160 | 770 | 203 | 67 | 357 | 27 | 26 |
| 11 | 49 | 51 | 669 | 184 | e150 | e140 | 592 | 195 | 144 | 288 | 25 | 23 |
| 12 | 68 | 50 | 686 | 177 | e145 | e130 | 526 | 176 | 105 | 232 | 24 | 22 |
| 13 | 41 | 57 | 638 | 181 | e140 | e125 | 481 | 130 | 90 | 171 | 24 | 20 |
| 14 | 57 | 61 | 602 | 903 | e140 | e110 | 397 | 124 | 448 | 105 | 24 | 20 |
| 15 | 43 | 63 | 577 | e880 | e170 | e110 | 363 | 134 | 314 | 141 | 24 | 21 |
| 16 | 52 | 60 | 528 | e610 | e285 | e110 | 344 | 176 | 278 | 109 | 24 | 49 |
| 17 | 72 | 60 | 500 | e470 | e400 | e110 | 267 | 157 | 1,090 | 152 | 24 | 42 |
| 18 | 66 | 63 | 415 | e350 | e320 | e115 | 238 | 136 | 1,550 | 127 | 23 | 38 |
| 19 | 60 | 61 | 248 | e327 | e260 | e117 | 218 | 124 | 918 | 124 | 22 | 34 |
| 20 | 56 | 59 | 218 | e340 | e230 | e119 | 210 | 122 | 652 | 114 | 21 | 32 |
| 21 | 54 | 67 | e230 | e270 | e200 | e132 | 228 | 112 | 468 | 98 | 21 | 32 |
| 22 | 52 | 70 | e250 | e230 | e174 | e161 | 210 | 116 | 314 | 80 | 21 | 31 |
| 23 | 51 | 68 | 284 | e220 | e155 | e177 | 283 | 162 | 267 | 82 | 21 | 25 |
| 24 | 49 | 68 | 1,010 | e210 | e143 | e170 | 377 | 166 | 204 | 71 | 21 | 22 |
| 25 | 47 | 189 | 593 | e210 | e137 | e175 | 355 | 234 | 178 | 65 | 21 | 22 |
| 26 | 45 | 459 | e395 | e205 | e132 | e185 | 317 | 217 | 163 | 61 | 20 | 22 |
| 27 | 43 | 251 | e320 | e200 | e127 | e200 | 296 | 114 | 144 | 49 | 19 | 33 |
| 28 | 42 | 228 | e280 | e195 | e123 | e640 | 411 | 111 | 124 | 69 | 18 | 36 |
| 29 | 41 | 480 | e250 | e190 | --- | e1,350 | 404 | 105 | 143 | 57 | 17 | 30 |
| 30 | 40 | 344 | e233 | e185 | --- | e1,300 | 348 | 112 | 195 | 49 | 15 | 33 |
| 31 | 43 | --- | e215 | e180 | --- | 1,380 | --- | 101 | --- | 45 | 42 | --- |
| TOTAL | 1,953 | 3,435 | 14,868 | 9,088 | 4,841 | 8,259 | 21,231 | 6,216 | 8,607 | 3,656 | 894 | 1,165 |
| MEAN | 63.0 | 114 | 480 | 293 | 173 | 266 | 708 | 201 | 287 | 118 | 28.8 | 38.8 |
| MAX | 142 | 480 | 1,020 | 903 | 400 | 1,380 | 2,420 | 521 | 1,550 | 357 | 71 | 184 |
| MIN | 40 | 49 | 215 | 177 | 123 | 95 | 210 | 101 | 60 | 45 | 15 | 20 |
| CFSM | 0.34 | 0.61 | 2.56 | 1.57 | 0.92 | 1.42 | 3.78 | 1.07 | 1.53 | 0.63 | 0.15 | 0.21 |
| IN. | 0.39 | 0.68 | 2.96 | 1.81 | 0.96 | 1.64 | 4.22 | 1.24 | 1.71 | 0.73 | 0.18 | 0.23 |

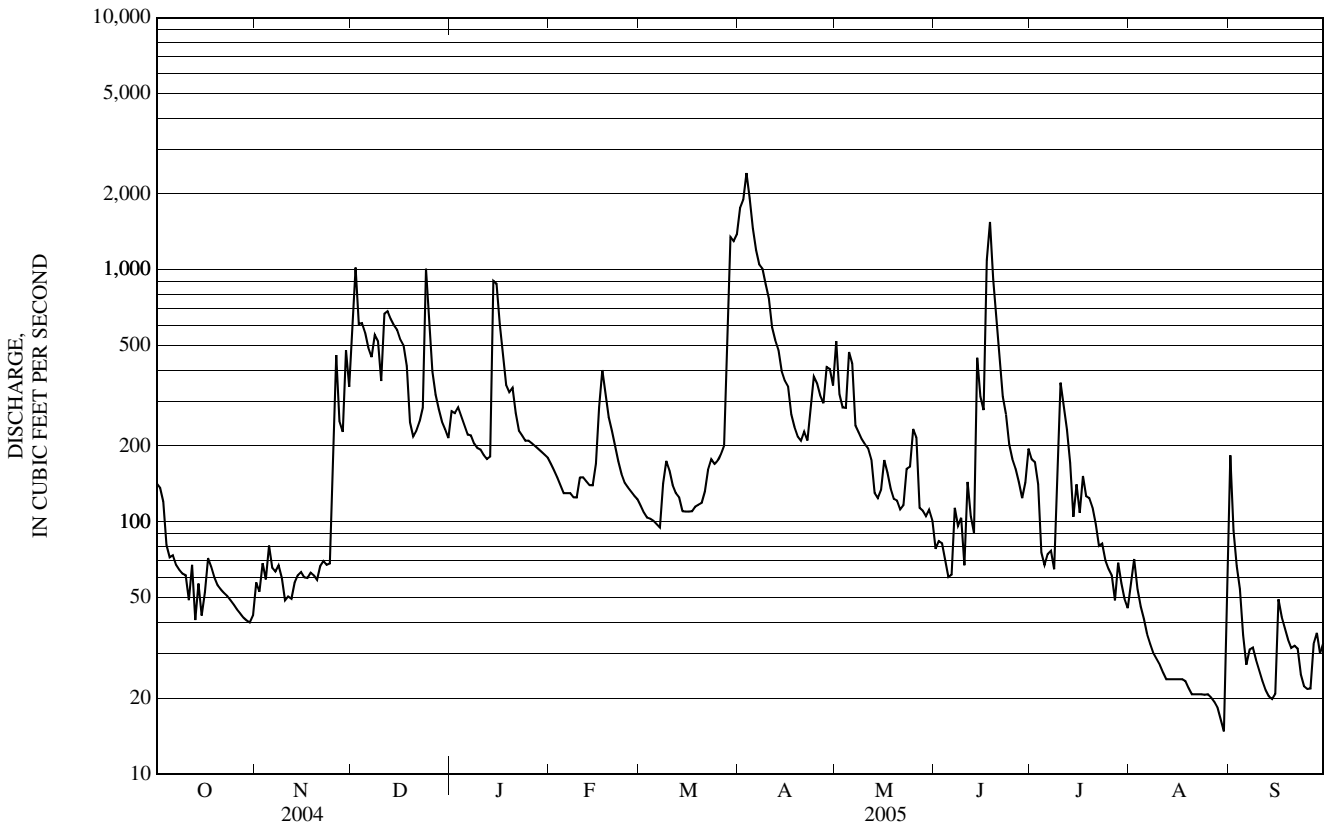
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 139 | 226 | 270 | 258 | 260 | 519 | 670 | 323 | 166 | 104 | 86.9 | 90.8 |
| MAX | 721 | 760 | 1,018 | 897 | 800 | 1,627 | 1,441 | 902 | 776 | 639 | 629 | 666 |
| (WY) | (1978) | (1973) | (1984) | (1996) | (1984) | (1986) | (1977) | (1983) | (1947) | (1976) | (1976) | (1938) |
| MIN | 13.8 | 19.5 | 38.4 | 42.0 | 26.8 | 113 | 231 | 71.5 | 19.4 | 7.08 | 3.94 | 8.19 |
| (WY) | (2002) | (2002) | (1965) | (1931) | (1980) | (1940) | (1966) | (1941) | (1965) | (1965) | (1965) | (1995) |

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1929 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 98,970 | | 84,213 | | 259 | |
| ANNUAL MEAN | 270 | | 231 | | 527 | |
| HIGHEST ANNUAL MEAN | | | | | 1976 | |
| LOWEST ANNUAL MEAN | | | | | 1965 | |
| HIGHEST DAILY MEAN | 2,280 | May 25 | 2,420 | Apr 3 | 7,010 | Jan 20, 1996 |
| LOWEST DAILY MEAN | 33 | Jul 14 | 15 | Aug 30 | a 2.1 | Aug 8, 1965 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Jul 2 | 19 | Aug 24 | 3.0 | Aug 13, 1965 |
| MAXIMUM PEAK FLOW | | | 2,570 | Apr 3 | b 14,800 | Jul 20, 1945 |
| MAXIMUM PEAK STAGE | | | 11.97 | Apr 3 | c 24.36 | Jul 20, 1945 |
| ANNUAL RUNOFF (CFSM) | 1.45 | | 1.23 | | 1.38 | |
| ANNUAL RUNOFF (INCHES) | 19.69 | | 16.75 | | 18.81 | |
| 10 PERCENT EXCEEDS | 599 | | 527 | | 614 | |
| 50 PERCENT EXCEEDS | 196 | | 132 | | 139 | |
| 90 PERCENT EXCEEDS | 52 | | 31 | | 28 | |

- a Also occurred on Sept. 13, 1977.
- b From rating curve extended above 2,600 ft³/s as explained above.
- c From high water mark in well.
- e Estimated.



04280350 METTAWEE RIVER NEAR PAWLET, VT

LOCATION.--Lat 43° 22' 14", long 73° 13' 00", Rutland County, Hydrologic Unit 02010001, on left bank, 10 ft downstream from Betts Bridge Road bridge, 20 ft southwest of Betts Bridge Road and Offesend Road intersection, 0.8 mi upstream of State Highway 153 bridge, 1.0 mi southwest of Offesend Road and State Highway 30 intersection at Butternut Bend, and 2.5 mi northwest of State Highways 30 and 133 intersection in Pawlet.

DRAINAGE AREA.--70.2 mi².

PERIOD OF RECORD.--Discharge records: October 1984 to current year.

REVISED RECORDS.--WDR NH-VT-97-1: 1993, 1994, 1996 (P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 525 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s (revised) and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Dec 1 | 1800 | 1,570 | 4.63 | Apr 2 | 1245 | 1,750 | 4.80 |
| Dec 23 | 2300 | 1,620 | 4.67 | Apr 3 | 0830 | *2,100 | *5.04 |
| Jan 14 | 1015 | 1,480 | 4.55 | Jun 14 | 0530 | 1,460 | 4.59 |
| Mar 28 | 1615 | 1,850 | 4.86 | Jun 17 | 1745 | 1,880 | 4.90 |

Minimum discharge, 19 ft³/s, Aug. 28, Sept. 24, 25, gage height, 1.72 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|------|
| 1 | 62 | 35 | 708 | 164 | e108 | e86 | 844 | 227 | e112 | 116 | 37 | 122 |
| 2 | 62 | 34 | 624 | 154 | e103 | e84 | 1,130 | 204 | e99 | 114 | 39 | 58 |
| 3 | 61 | 47 | 395 | 178 | e102 | e82 | 1,570 | 189 | e90 | 93 | 34 | 45 |
| 4 | 54 | 44 | 290 | 183 | e100 | e78 | 976 | 173 | e78 | 82 | 33 | 39 |
| 5 | e50 | 59 | 232 | 138 | e98 | e76 | 648 | 159 | e68 | 75 | 31 | 35 |
| 6 | e47 | 50 | 185 | 126 | e96 | e74 | 538 | 146 | e71 | 77 | 29 | 32 |
| 7 | e45 | 46 | 172 | 120 | e93 | 79 | 503 | 138 | e131 | 71 | 27 | 30 |
| 8 | 42 | 43 | 224 | e104 | e91 | 162 | 622 | 134 | e98 | 70 | 25 | 28 |
| 9 | e38 | 42 | 180 | e101 | e87 | e106 | 460 | 127 | e106 | 150 | 25 | 27 |
| 10 | e34 | 41 | 191 | e96 | e130 | e100 | 371 | 118 | e99 | 143 | 23 | 25 |
| 11 | 32 | 41 | 238 | e92 | e107 | e94 | 313 | 110 | e104 | 106 | 23 | 24 |
| 12 | 32 | 40 | 216 | e88 | e96 | e91 | 269 | 102 | e116 | 84 | 22 | 23 |
| 13 | 32 | 39 | 192 | e132 | e90 | e87 | 237 | 95 | e110 | 74 | 38 | 22 |
| 14 | 31 | 38 | 173 | 843 | e86 | 85 | 204 | 92 | 518 | 78 | 29 | 22 |
| 15 | e33 | 38 | 147 | e360 | 148 | 82 | 178 | 156 | e213 | 79 | 29 | 29 |
| 16 | e43 | 38 | 137 | e285 | 247 | 82 | 166 | 160 | e188 | 111 | 27 | 31 |
| 17 | 45 | 37 | 132 | e240 | 273 | 81 | 152 | 129 | 1,100 | 139 | 33 | 26 |
| 18 | 44 | 37 | e116 | e205 | e180 | 81 | 138 | 118 | 606 | 93 | 26 | 25 |
| 19 | e40 | 37 | e107 | e180 | e150 | 81 | 132 | 109 | 393 | 80 | 24 | 24 |
| 20 | e39 | 36 | e91 | e163 | e138 | 82 | 134 | 103 | 304 | 71 | 32 | 25 |
| 21 | 37 | 44 | e93 | e150 | e125 | 94 | 141 | 96 | 246 | 63 | 38 | 25 |
| 22 | 38 | 42 | e127 | e140 | e120 | 112 | 121 | 105 | 210 | 60 | 31 | 22 |
| 23 | 36 | 40 | 348 | e135 | e112 | 113 | 168 | 127 | 177 | 67 | 27 | 21 |
| 24 | 34 | 41 | 613 | e143 | e97 | 108 | 242 | 154 | 154 | 54 | 25 | 20 |
| 25 | 34 | 213 | 271 | e137 | e94 | 115 | 201 | 161 | 134 | 51 | 23 | 20 |
| 26 | e33 | 194 | e177 | e130 | e92 | 118 | 177 | e174 | 118 | 48 | 22 | 22 |
| 27 | 33 | 129 | e160 | e135 | e91 | 129 | 190 | e160 | 105 | 48 | 21 | 51 |
| 28 | 34 | 184 | e155 | e137 | e89 | 779 | 224 | e135 | 99 | 46 | 21 | 33 |
| 29 | 34 | 279 | e150 | e128 | --- | 791 | 199 | e117 | 136 | 42 | 95 | 41 |
| 30 | 34 | 194 | e140 | e117 | --- | 563 | 197 | e107 | 148 | 39 | 50 | 46 |
| 31 | 36 | --- | e145 | e110 | --- | 617 | --- | e109 | --- | 37 | 66 | --- |
| TOTAL | 1,249 | 2,182 | 7,129 | 5,414 | 3,343 | 5,312 | 11,445 | 4,234 | 6,131 | 2,461 | 1,005 | 993 |
| MEAN | 40.3 | 72.7 | 230 | 175 | 119 | 171 | 382 | 137 | 204 | 79.4 | 32.4 | 33.1 |
| MAX | 62 | 279 | 708 | 843 | 273 | 791 | 1,570 | 227 | 1,100 | 150 | 95 | 122 |
| MIN | 31 | 34 | 91 | 88 | 86 | 74 | 121 | 92 | 68 | 37 | 21 | 20 |
| CFSM | 0.57 | 1.04 | 3.28 | 2.49 | 1.70 | 2.44 | 5.43 | 1.95 | 2.91 | 1.13 | 0.46 | 0.47 |
| IN. | 0.66 | 1.16 | 3.78 | 2.87 | 1.77 | 2.81 | 6.06 | 2.24 | 3.25 | 1.30 | 0.53 | 0.53 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2005, BY WATER YEAR (WY)

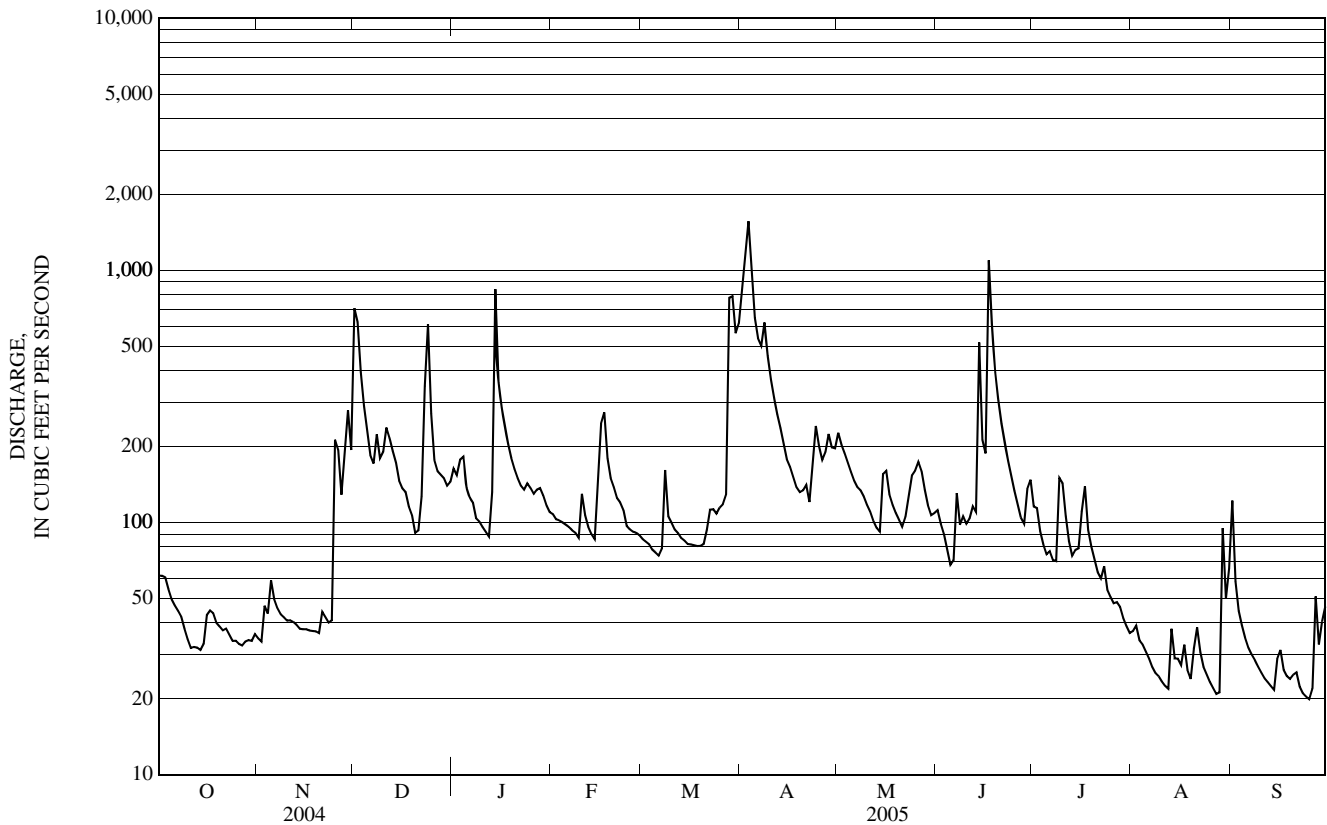
| | 70.4 | 124 | 151 | 135 | 109 | 201 | 288 | 162 | 93.0 | 61.4 | 55.8 | 42.6 |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|
| MAX (WY) | 286 (1988) | 294 (2004) | 457 (2004) | 344 (1998) | 194 (2000) | 376 (2003) | 559 (1994) | 371 (1996) | 204 (2005) | 169 (1996) | 263 (2004) | 132 (2004) |
| MIN (WY) | 14.3 (2002) | 21.8 (2002) | 40.5 (2002) | 42.9 (2002) | 45.5 (1987) | 73.7 (2001) | 115 (1995) | 55.4 (1987) | 32.8 (1999) | 13.8 (1995) | 11.1 (2002) | 10.6 (1995) |

ST. LAWRENCE RIVER BASIN

04280350 METTAWEE RIVER NEAR PAWLET, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | | FOR 2005 WATER YEAR | | | WATER YEARS 1985 - 2005 | |
|--------------------------|------------------------|--------|--|---------------------|--------|--|-------------------------|--------------|
| ANNUAL TOTAL | 58,097 | | | 50,898 | | | 124 | |
| ANNUAL MEAN | 159 | | | 139 | | | 207 | |
| HIGHEST ANNUAL MEAN | | | | | | | 75.9 | |
| LOWEST ANNUAL MEAN | | | | | | | 207 | |
| HIGHEST DAILY MEAN | 1,380 | May 24 | | 1,570 | Apr 3 | | 2,860 | Dec 17, 2000 |
| LOWEST DAILY MEAN | 31 | Oct 14 | | a 20 | Sep 24 | | 5.7 | Sep 10, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 33 | Oct 9 | | 22 | Sep 20 | | 6.3 | Sep 8, 2002 |
| MAXIMUM PEAK FLOW | | | | 2,100 | Apr 3 | | b 7,080 | Dec 17, 2000 |
| MAXIMUM PEAK STAGE | | | | 5.04 | Apr 3 | | 7.31 | Dec 17, 2000 |
| INSTANTANEOUS LOW FLOW | | | | c 19 | Aug 28 | | d 5.0 | Sep 10, 2002 |
| ANNUAL RUNOFF (CFSM) | 2.26 | | | 1.99 | | | 1.77 | |
| ANNUAL RUNOFF (INCHES) | 30.79 | | | 26.97 | | | 24.05 | |
| 10 PERCENT EXCEEDS | 314 | | | 241 | | | 260 | |
| 50 PERCENT EXCEEDS | 112 | | | 98 | | | 81 | |
| 90 PERCENT EXCEEDS | 41 | | | 30 | | | 22 | |

- a Also occurred on Sept. 25.
- b From rating curve extended above 3,200 ft³/s.
- c Also occurred on Sept. 24 and 25.
- d Also occurred on Sept. 11, 2002.
- e Estimated.



04282000 OTTER CREEK AT CENTER RUTLAND, VT

LOCATION.--Lat 43° 36' 13", long 73° 00' 49", Rutland County, Hydrologic Unit 02010002, on right bank, 200 ft downstream from dam, 500 ft upstream from bridge on US Highway 4 (Business) in Center Rutland, 0.3 mi upstream of Clarendon River, 1.2 mi downstream from East Creek, and 2.1 mi west of US 7N and 4E intersection in Rutland.

DRAINAGE AREA.--307 mi².

PERIOD OF RECORD.--Discharge records: May 1928 to current year.

REVISED RECORDS.--WSP 1084: 1929.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 474.80 ft above National Geodetic Vertical Datum of 1929; prior to October 1, 1964, datum was 1.00 ft higher. Prior to July 22, 1929, nonrecording gage at same site.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by power plants and Chittenden Reservoir 14 mi upstream on East Creek. These reservoirs have a combined usable capacity of about 819.8 million ft³. Prior to June 3, 1947, regulation by East Pittsford Reservoir, usable capacity, 150 million ft³.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Apr 3 | 1945 | *6,530 | *10.97 | No other peak greater than base discharge. | | | |

Minimum daily discharge, 77 ft³/s, Aug. 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1 | 230 | 211 | 1,300 | e643 | e432 | e380 | 2,240 | 1,080 | 543 | 618 | 158 | 540 |
| 2 | 229 | 225 | 1,990 | e620 | e410 | e370 | 2,630 | 942 | 478 | 455 | 199 | 335 |
| 3 | 206 | 344 | 1,680 | e743 | e394 | e350 | 5,020 | 827 | 437 | 357 | 188 | 208 |
| 4 | 227 | 334 | 1,060 | e795 | e372 | e335 | 5,090 | 712 | 372 | 287 | 225 | 159 |
| 5 | 230 | 401 | 804 | e638 | e331 | e327 | 3,220 | 634 | 319 | 309 | 160 | 134 |
| 6 | 209 | 374 | 690 | e560 | e285 | e340 | 2,280 | 578 | 335 | 309 | 118 | 119 |
| 7 | 177 | 285 | 650 | e505 | e327 | e350 | 2,070 | 529 | 628 | 293 | 99 | 109 |
| 8 | 192 | 266 | 781 | e430 | e337 | e460 | 2,480 | 508 | 475 | 301 | 92 | 102 |
| 9 | 166 | 263 | 822 | e390 | e370 | e440 | 2,470 | 487 | 497 | 679 | 93 | 95 |
| 10 | 144 | 248 | 749 | e435 | e405 | e410 | 1,930 | 452 | 480 | 994 | 84 | 92 |
| 11 | 170 | 255 | 804 | e410 | e405 | e375 | 1,550 | 433 | 509 | 658 | 78 | 86 |
| 12 | 174 | 253 | 859 | e440 | e360 | e355 | 1,280 | 401 | 557 | 425 | 77 | 82 |
| 13 | 172 | 217 | 762 | e490 | e340 | e345 | 1,100 | 362 | 507 | 308 | 87 | 81 |
| 14 | 168 | 165 | e573 | 1,800 | e347 | e333 | 980 | 351 | 1,120 | 271 | 120 | 78 |
| 15 | 177 | 204 | e470 | e1,450 | e400 | e340 | 909 | 466 | 1,110 | 297 | 127 | 231 |
| 16 | 240 | 228 | e422 | e770 | e505 | e350 | 804 | 847 | 1,020 | 277 | 119 | 180 |
| 17 | 325 | 228 | e421 | e570 | e680 | e330 | 772 | 587 | 1,690 | 285 | 107 | 156 |
| 18 | 279 | e223 | e398 | e540 | e585 | e338 | 827 | 472 | 1,910 | 337 | 119 | 138 |
| 19 | 234 | e241 | e398 | e502 | e480 | e363 | 781 | 431 | 1,260 | 306 | 108 | 126 |
| 20 | 209 | 198 | e360 | e450 | e430 | e350 | 757 | 400 | 952 | 297 | 98 | 124 |
| 21 | 199 | 233 | e364 | e484 | e420 | e375 | 933 | 371 | 746 | 256 | 153 | 145 |
| 22 | 196 | 272 | e381 | e470 | e405 | e410 | 745 | 395 | 665 | 231 | 164 | 120 |
| 23 | 187 | 258 | e620 | e528 | e400 | e430 | 946 | 599 | 582 | 237 | 125 | 102 |
| 24 | 170 | 249 | 1,790 | e565 | e360 | e390 | 1,610 | 844 | 506 | 205 | 104 | 93 |
| 25 | 165 | 889 | e1,200 | e539 | e388 | e410 | 1,790 | 1,050 | 478 | 178 | 94 | 88 |
| 26 | 171 | 1,160 | e560 | e504 | e370 | 404 | 1,450 | 846 | 406 | 158 | 90 | 100 |
| 27 | 189 | 667 | e517 | e523 | e360 | 426 | 1,040 | 779 | 411 | 167 | 79 | 159 |
| 28 | 216 | 639 | e490 | e523 | e365 | 937 | 1,280 | 655 | 528 | 187 | 81 | 235 |
| 29 | 221 | 1,330 | e580 | e507 | --- | 1,860 | 1,200 | 559 | 418 | 148 | 224 | 190 |
| 30 | 173 | 936 | e575 | e464 | --- | 1,690 | 938 | 507 | 664 | 136 | 239 | 221 |
| 31 | 153 | --- | e525 | e445 | --- | 1,690 | --- | 526 | --- | 126 | 289 | --- |
| TOTAL | 6,198 | 11,796 | 23,595 | 18,733 | 11,263 | 16,263 | 51,122 | 18,630 | 20,603 | 10,092 | 4,098 | 4,628 |
| MEAN | 200 | 393 | 761 | 604 | 402 | 525 | 1,704 | 601 | 687 | 326 | 132 | 154 |
| MAX | 325 | 1,330 | 1,990 | 1,800 | 680 | 1,860 | 5,090 | 1,080 | 1,910 | 994 | 289 | 540 |
| MIN | 144 | 165 | 360 | 390 | 285 | 327 | 745 | 351 | 319 | 126 | 77 | 78 |
| CFSM | 0.65 | 1.28 | 2.48 | 1.97 | 1.31 | 1.71 | 5.55 | 1.96 | 2.24 | 1.06 | 0.43 | 0.50 |
| IN. | 0.75 | 1.43 | 2.86 | 2.27 | 1.36 | 1.97 | 6.19 | 2.26 | 2.50 | 1.22 | 0.50 | 0.56 |

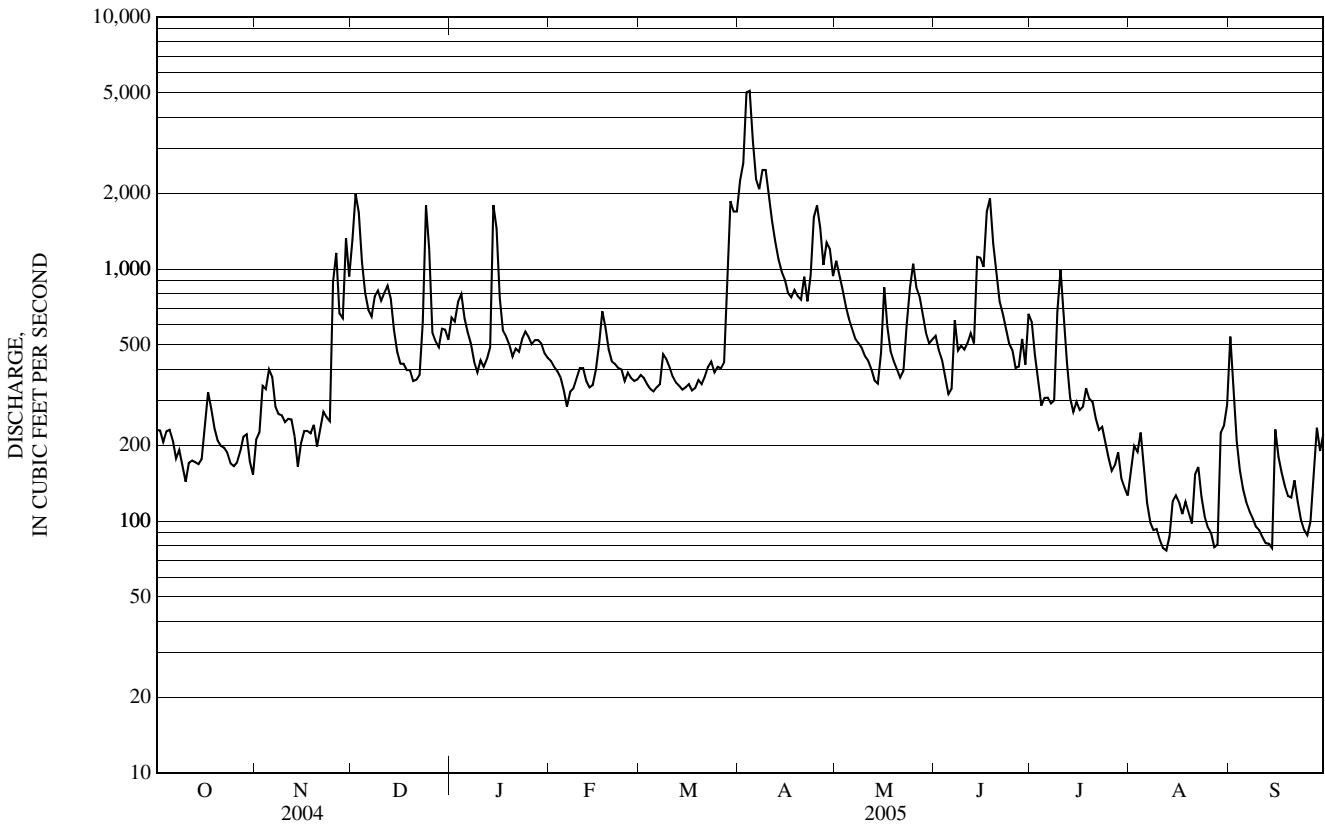
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 350 | 504 | 520 | 476 | 456 | 818 | 1,467 | 824 | 443 | 286 | 244 | 254 |
| MAX | 1,227 | 1,025 | 1,291 | 1,094 | 1,564 | 2,376 | 3,078 | 2,120 | 1,565 | 1,047 | 1,591 | 1,385 |
| (WY) | (1988) | (1960) | (1984) | (1949) | (1981) | (1936) | (1969) | (1940) | (1947) | (1976) | (1976) | (1938) |
| MIN | 86.5 | 141 | 126 | 100 | 110 | 231 | 445 | 271 | 130 | 78.2 | 65.5 | 78.4 |
| (WY) | (1965) | (1965) | (1948) | (1948) | (1980) | (1965) | (1995) | (1941) | (1965) | (1965) | (1999) | (1964) |

04282000 OTTER CREEK AT CENTER RUTLAND, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1928 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 194,832 | | 197,021 | | 552 | |
| ANNUAL MEAN | 532 | | 540 | | 1,049 | |
| HIGHEST ANNUAL MEAN | | | | | 1976 | |
| LOWEST ANNUAL MEAN | | | | | 239 | |
| HIGHEST DAILY MEAN | 3,550 | May 25 | 5,090 | Apr 4 | 10,100 | Sep 22, 1938 |
| LOWEST DAILY MEAN | 137 | Jan 16 | 77 | Aug 12 | 38 | Aug 3, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 167 | Oct 9 | 87 | Aug 7 | 48 | Aug 1, 1999 |
| MAXIMUM PEAK FLOW | | | 6,530 | Apr 3 | 13,700 | Sep 22, 1938 |
| MAXIMUM PEAK STAGE | | | 10.97 | Apr 3 | a 12.45 | Sep 22, 1938 |
| ANNUAL RUNOFF (CFSM) | 1.73 | | 1.76 | | 1.80 | |
| ANNUAL RUNOFF (INCHES) | 23.61 | | 23.87 | | 24.44 | |
| 10 PERCENT EXCEEDS | 1,040 | | 1,070 | | 1,200 | |
| 50 PERCENT EXCEEDS | 366 | | 394 | | 340 | |
| 90 PERCENT EXCEEDS | 191 | | 126 | | 133 | |

a At datum then in use.
e Estimated.



04282500 OTTER CREEK AT MIDDLEBURY, VT

LOCATION.--Lat 44° 00'47", long 73° 10'06", Addison County, Hydrologic Unit 02010002, on right bank, 150 ft upstream from State Highway 125 bridge in Middlebury, 0.1 mi southwest of US 7 and State Highway 125 intersection, and 3.6 mi downstream from Middlebury River.

DRAINAGE AREA.--628 mi².

PERIOD OF RECORD.--Discharge records: April 1903 to April 1907, October 1910 to January 1920, October 1928 to current year.

REVISED RECORDS.--WSP 434: 1903-04. WSP 684: 1913(M), drainage area. WSP 1114: 1913. WSP 1207: 1929, 1931.

GAGE.--Water-stage recorder. Datum of gage is 335.75 ft above National Geodetic Vertical Datum of 1929. Nonrecording gage at site 1,800 ft upstream at datum 10 ft lower, April 1, 1903 to April 30, 1907 and October 5, 1910 to January 31, 1920; nonrecording gage at present site and datum, October 1, 1928 to October 17, 1933.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by Chittenden Reservoir, usable capacity, 819 million ft³ on East Creek.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 13,600 ft³/s, November 4, 1927, gage height, 13.3 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,820 ft³/s, Apr. 8, gage height, 6.24 ft; minimum daily discharge, 168 ft³/s, Sep. 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1 | 479 | 313 | 1,640 | 1,400 | e950 | e690 | 2,800 | 2,150 | 787 | 980 | 277 | 1,050 |
| 2 | 478 | 354 | 1,830 | 1,330 | e900 | e700 | 2,980 | 2,050 | 786 | 991 | 307 | 906 |
| 3 | 434 | 448 | 1,870 | 1,300 | e860 | e690 | 3,320 | 1,950 | 697 | 800 | 326 | 661 |
| 4 | 401 | 603 | 1,930 | 1,320 | e810 | e680 | 3,460 | 1,830 | 624 | 635 | 326 | 416 |
| 5 | 393 | 606 | 1,960 | 1,340 | e770 | e670 | 3,650 | 1,680 | 548 | 545 | 322 | 300 |
| 6 | 400 | 652 | 1,910 | 1,290 | e720 | e650 | 4,120 | 1,520 | 515 | 576 | 285 | 255 |
| 7 | 382 | 601 | 1,820 | 1,200 | e670 | e640 | 4,660 | 1,340 | 604 | 594 | 249 | 249 |
| 8 | 355 | 505 | 1,770 | 1,090 | e710 | e740 | 4,780 | 1,110 | 768 | 521 | 215 | 209 |
| 9 | 341 | 476 | 1,690 | 911 | e750 | e900 | 4,640 | 968 | 739 | 791 | 200 | 201 |
| 10 | 328 | 469 | 1,640 | 831 | e820 | e860 | 4,380 | 909 | 820 | 1,490 | 197 | 189 |
| 11 | 296 | 446 | 1,830 | 859 | e880 | e820 | 4,110 | 858 | 853 | 1,420 | 186 | 186 |
| 12 | 303 | 456 | 1,920 | 815 | e810 | e760 | 3,900 | 763 | 819 | 1,250 | 182 | 181 |
| 13 | 314 | 439 | 1,840 | 859 | e750 | e710 | 3,720 | 714 | 876 | 956 | 179 | 172 |
| 14 | 310 | 395 | 1,780 | 1,480 | e720 | e680 | 3,520 | 668 | 966 | 723 | 180 | 168 |
| 15 | 313 | 349 | 1,660 | 1,880 | e740 | e660 | 3,280 | 616 | 1,440 | 648 | 212 | 189 |
| 16 | 335 | 371 | 1,460 | 2,050 | e870 | e670 | 3,020 | 828 | 1,740 | 625 | 221 | 313 |
| 17 | 430 | 414 | 1,310 | e1,800 | e1,040 | e680 | 2,780 | 1,070 | 2,400 | 579 | 207 | 328 |
| 18 | 508 | 432 | 1,220 | e1,570 | e1,220 | e660 | 2,530 | 941 | 2,570 | 574 | 197 | 288 |
| 19 | 470 | 437 | 1,020 | e1,350 | e1,110 | e670 | 2,330 | 785 | 2,460 | 616 | 197 | 252 |
| 20 | 446 | 423 | e890 | e1,150 | e1,000 | e650 | 2,120 | 687 | 2,420 | 627 | 195 | 248 |
| 21 | 416 | 405 | e880 | e1,070 | e880 | e700 | 2,010 | 629 | 2,400 | 583 | 270 | 232 |
| 22 | 401 | 441 | e900 | e1,030 | e830 | e780 | 1,870 | 605 | 2,350 | 516 | 321 | 254 |
| 23 | 381 | 492 | e910 | e1,050 | e810 | e870 | 1,890 | 665 | 2,240 | 476 | 304 | 220 |
| 24 | 342 | 504 | e1,350 | e1,180 | e780 | e940 | 2,060 | 862 | 2,050 | 450 | 241 | 209 |
| 25 | 320 | 642 | e1,430 | e1,160 | e750 | e1,020 | 2,030 | 1,130 | 1,810 | 394 | 224 | 186 |
| 26 | 314 | 1,320 | e1,500 | e1,090 | e720 | e1,130 | 2,030 | 1,250 | 1,560 | 363 | 198 | 189 |
| 27 | 334 | 1,430 | e1,570 | e1,060 | e690 | e1,240 | 2,080 | 1,220 | 1,270 | 385 | 181 | 288 |
| 28 | 357 | 1,350 | e1,530 | e1,080 | e680 | e1,540 | 2,200 | 1,110 | 1,040 | 457 | 170 | 330 |
| 29 | 381 | 1,450 | e1,500 | e1,060 | --- | e1,900 | 2,170 | 974 | 1,000 | 396 | 175 | 346 |
| 30 | 393 | 1,540 | 1,480 | e1,030 | --- | e2,120 | 2,130 | 854 | 879 | 332 | 299 | 360 |
| 31 | 343 | --- | 1,430 | e990 | --- | 2,490 | --- | 787 | --- | 291 | 467 | --- |
| TOTAL | 11,698 | 18,763 | 47,470 | 37,625 | 23,240 | 28,910 | 90,570 | 33,523 | 40,031 | 20,584 | 7,510 | 9,375 |
| MEAN | 377 | 625 | 1,531 | 1,214 | 830 | 933 | 3,019 | 1,081 | 1,334 | 664 | 242 | 312 |
| MAX | 508 | 1,540 | 1,960 | 2,050 | 1,220 | 2,490 | 4,780 | 2,150 | 2,570 | 1,490 | 467 | 1,050 |
| MIN | 296 | 313 | 880 | 815 | 670 | 640 | 1,870 | 605 | 515 | 291 | 170 | 168 |
| CFSM | 0.60 | 1.00 | 2.44 | 1.93 | 1.32 | 1.49 | 4.81 | 1.72 | 2.12 | 1.06 | 0.39 | 0.50 |
| IN. | 0.69 | 1.11 | 2.81 | 2.23 | 1.38 | 1.71 | 5.36 | 1.99 | 2.37 | 1.22 | 0.44 | 0.56 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1907, 1911 - 1920, 1929 - 2005, BY WATER YEAR (WY)

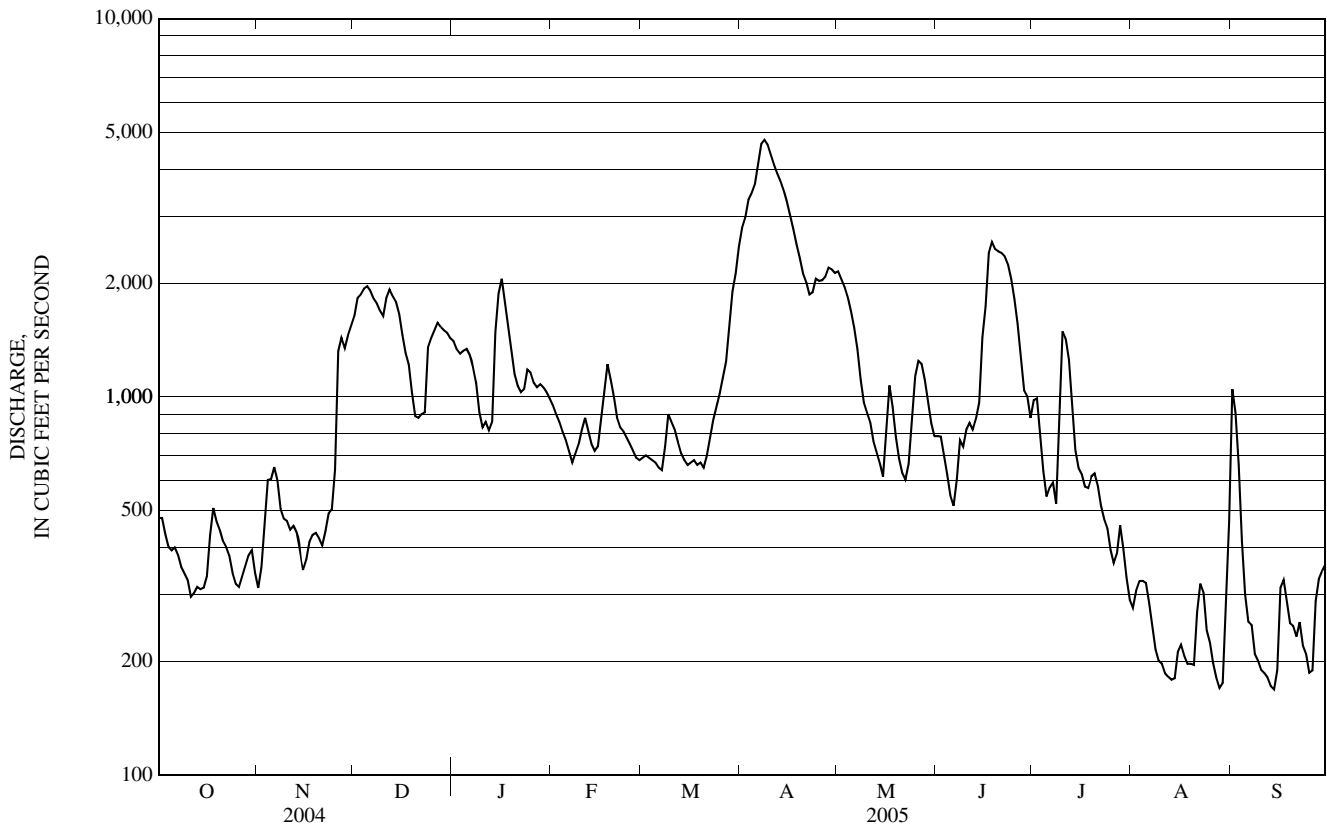
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 633 | 877 | 937 | 889 | 852 | 1,506 | 2,562 | 1,525 | 835 | 546 | 467 | 477 |
| MAX | 2,021 | 2,675 | 2,610 | 2,509 | 2,414 | 4,538 | 4,500 | 3,717 | 3,025 | 1,833 | 2,624 | 2,411 |
| (WY) | (1988) | (2004) | (1984) | (1949) | (1981) | (1936) | (1960) | (1996) | (1947) | (1996) | (1976) | (1938) |
| MIN | 166 | 241 | 246 | 205 | 229 | 384 | 885 | 370 | 208 | 126 | 129 | 168 |
| (WY) | (2002) | (2002) | (1948) | (1948) | (1980) | (1940) | (1995) | (1903) | (1965) | (1965) | (1965) | (1982) |

ST. LAWRENCE RIVER BASIN

04282500 OTTER CREEK AT MIDDLEBURY, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1903-07,11-20,19-2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-----------------------------------|--------------|
| ANNUAL TOTAL | 399,993 | | 369,299 | | 1,008 | |
| ANNUAL MEAN | 1,093 | | 1,012 | | 1,878 | |
| HIGHEST ANNUAL MEAN | | | | | 1976 | |
| LOWEST ANNUAL MEAN | | | | | 397 | |
| HIGHEST DAILY MEAN | 3,700 | Jan 1 | 4,780 | Apr 8 | 11,000 | Mar 21, 1936 |
| LOWEST DAILY MEAN | 296 | Oct 11 | 168 | Sep 14 | 86 | Sep 9, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 314 | Oct 10 | 184 | Sep 9 | 102 | Sep 3, 2002 |
| MAXIMUM PEAK FLOW | | | 4,820 | Apr 8 | 11,000 | Mar 20, 1936 |
| MAXIMUM PEAK STAGE | | | 6.24 | Apr 8 | 10.30 | Mar 20, 1936 |
| ANNUAL RUNOFF (CFSM) | 1.74 | | 1.61 | | 1.60 | |
| ANNUAL RUNOFF (INCHES) | 23.69 | | 21.88 | | 21.80 | |
| 10 PERCENT EXCEEDS | 2,190 | | 2,050 | | 2,330 | |
| 50 PERCENT EXCEEDS | 830 | | 770 | | 640 | |
| 90 PERCENT EXCEEDS | 400 | | 253 | | 256 | |

e Estimated



04282525 NEW HAVEN RIVER AT BROOKSVILLE NEAR MIDDLEBURY, VT

LOCATION.--Lat 44° 03'42", long 73° 10'16", Rutland County, Hydrologic Unit 02010002, on left bank, at downstream side of Dog Team Road bridge, 0.2 mi south of Brooksville, 0.6 mi upstream from mouth, 1.5 mi downstream of Muddy Branch, 3.3 mi north of US 7 and State Highway 125 intersection in Middlebury.

DRAINAGE AREA.-- 115 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

REVISED RECORDS.--WDR NH-VT-97-1: 1991(P), 1992(P), 1993(P), 1994(P), 1995(P), 1996(P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 235 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|-------|------|-----------------------------------|---------------------|
| Dec 24 | 0000 | ice jam | *8.62 | Jul 9 | 2345 | 2,300 | 7.15 |
| Apr 2 | 1745 | 2,410 | 7.24 | Aug 2 | 0115 | 1,780 | 6.65 |
| Apr 3 | 1130 | 2,830 | 7.57 | Sep 1 | 0030 | 2,320 | 7.17 |
| Jun 17 | 0830 | *2,880 | 7.61 | | | | |

Minimum discharge, 42 ft³/s, Aug. 19, gage height, 2.69 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | 72 | 57 | 563 | 311 | e81 | e70 | 1,060 | 446 | 123 | 94 | 78 | 757 |
| 2 | 69 | 56 | 593 | 211 | e75 | e69 | 1,370 | 366 | 108 | 92 | 573 | 180 |
| 3 | 69 | 123 | 288 | 231 | e70 | e64 | 2,120 | 314 | 97 | 80 | 145 | 113 |
| 4 | 66 | 105 | 215 | 218 | e75 | e76 | 1,100 | 256 | 90 | 72 | 99 | 91 |
| 5 | 69 | 97 | 182 | 188 | e74 | e74 | 674 | 228 | 83 | 68 | 138 | 81 |
| 6 | 66 | 91 | 140 | e154 | e74 | e64 | 516 | 207 | 87 | 75 | 126 | 72 |
| 7 | 64 | 79 | 150 | e140 | e76 | e63 | 564 | 196 | 159 | 78 | 82 | 83 |
| 8 | 62 | 71 | 317 | e130 | e81 | e76 | 628 | 180 | 96 | 71 | 70 | 68 |
| 9 | 60 | 67 | 256 | e127 | e94 | e79 | 456 | 171 | 94 | 813 | 64 | 67 |
| 10 | 58 | 63 | 210 | e128 | e98 | e83 | 378 | 158 | 117 | 1,000 | 58 | 74 |
| 11 | 59 | 64 | 673 | e117 | e92 | e79 | 330 | 155 | 97 | 275 | 54 | 61 |
| 12 | 60 | 67 | 583 | e113 | e88 | e72 | 272 | 156 | 92 | 165 | 51 | 52 |
| 13 | 59 | 60 | 321 | e138 | e81 | e68 | 240 | 138 | 83 | 141 | 54 | 48 |
| 14 | 57 | 55 | e210 | e658 | e84 | e66 | 219 | 130 | 116 | 117 | 53 | 45 |
| 15 | 60 | 59 | e180 | e395 | e88 | e65 | 202 | 145 | 333 | 107 | 72 | 87 |
| 16 | 77 | 58 | e180 | e260 | e97 | e66 | 190 | 210 | 611 | 91 | 58 | 85 |
| 17 | 90 | 59 | e175 | e163 | e108 | e66 | 194 | 170 | 2,200 | 86 | 50 | 79 |
| 18 | 76 | 60 | e165 | e142 | e92 | e67 | 206 | 143 | 1,460 | 85 | 45 | 122 |
| 19 | 67 | 61 | e155 | e133 | e88 | e68 | 204 | 130 | 606 | 81 | 43 | 85 |
| 20 | 63 | 58 | e130 | e123 | e86 | e71 | 257 | 120 | 362 | 72 | 43 | 69 |
| 21 | 64 | 83 | e130 | e117 | e88 | e77 | 473 | 114 | 254 | 65 | 141 | 64 |
| 22 | 60 | 99 | e150 | e115 | e86 | e91 | 274 | 139 | 257 | 65 | 92 | 55 |
| 23 | 59 | 82 | e450 | e107 | e78 | e97 | 555 | 177 | 199 | 122 | 72 | 50 |
| 24 | 59 | 73 | e900 | e103 | e76 | e95 | 904 | 288 | 161 | 76 | 62 | 50 |
| 25 | 58 | 326 | e300 | e102 | e73 | e103 | 554 | 216 | 136 | 66 | 61 | 48 |
| 26 | 57 | 341 | e230 | e100 | e72 | e135 | 362 | 166 | 118 | 61 | 53 | 51 |
| 27 | 56 | 159 | e210 | e98 | e69 | e193 | 295 | 176 | 105 | 125 | 48 | 207 |
| 28 | 56 | 196 | e220 | e94 | e68 | 448 | 501 | 178 | 95 | 197 | 46 | 118 |
| 29 | 75 | 431 | e225 | e90 | --- | 552 | 387 | 151 | 124 | 95 | 51 | 108 |
| 30 | 75 | 206 | e230 | e90 | --- | 429 | 296 | 133 | 108 | 75 | 48 | 148 |
| 31 | 63 | --- | e213 | e86 | --- | 632 | --- | 125 | --- | 66 | 310 | --- |
| TOTAL | 2,005 | 3,406 | 8,944 | 5,182 | 2,312 | 4,258 | 15,781 | 5,882 | 8,571 | 4,676 | 2,940 | 3,218 |
| MEAN | 64.7 | 114 | 289 | 167 | 82.6 | 137 | 526 | 190 | 286 | 151 | 94.8 | 107 |
| MAX | 90 | 431 | 900 | 658 | 108 | 632 | 2,120 | 446 | 2,200 | 1,000 | 573 | 757 |
| MIN | 56 | 55 | 130 | 86 | 68 | 63 | 190 | 114 | 83 | 61 | 43 | 45 |
| CFSM | 0.56 | 0.99 | 2.51 | 1.45 | 0.72 | 1.19 | 4.57 | 1.65 | 2.48 | 1.31 | 0.82 | 0.93 |
| IN. | 0.65 | 1.10 | 2.89 | 1.68 | 0.75 | 1.38 | 5.10 | 1.90 | 2.77 | 1.51 | 0.95 | 1.04 |

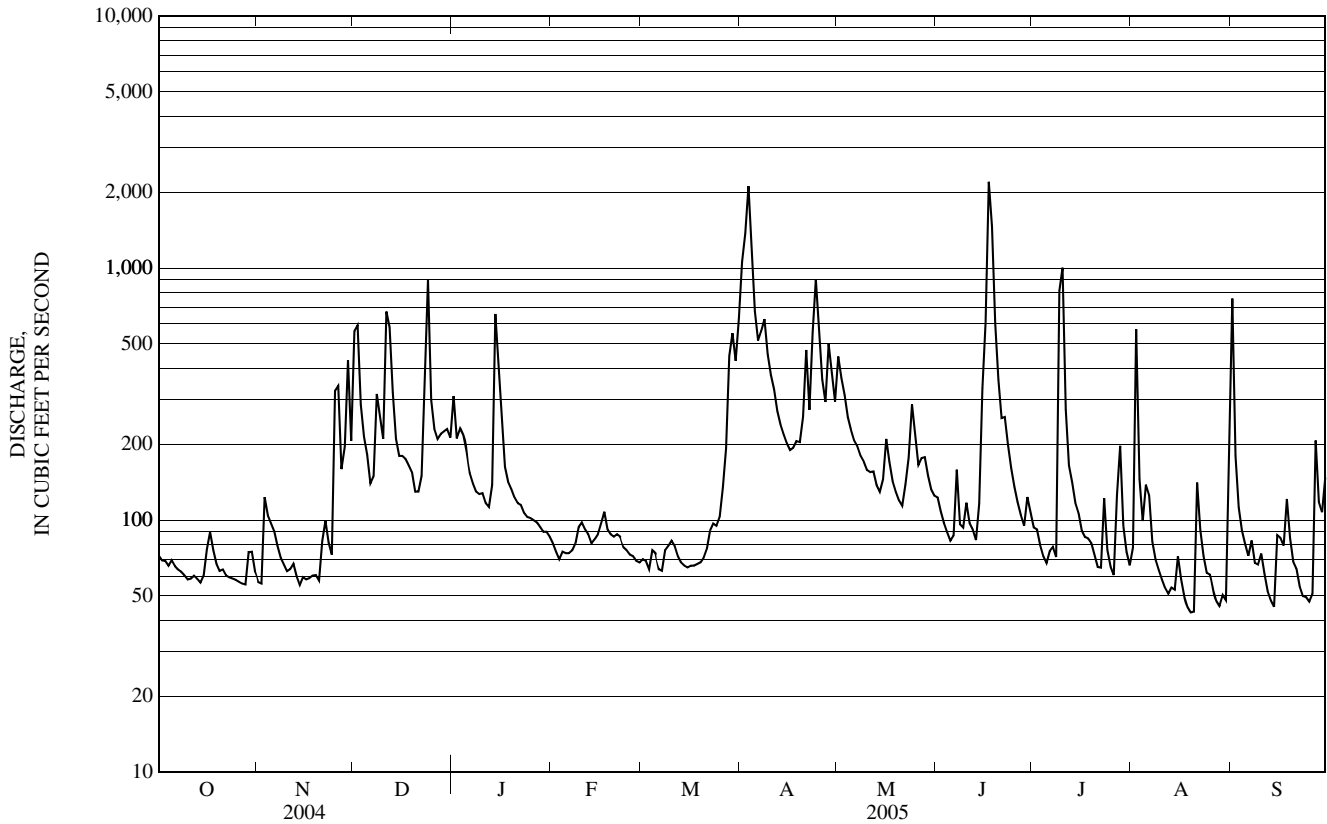
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 164 | 200 | 213 | 178 | 128 | 278 | 450 | 274 | 163 | 113 | 117 | 102 |
| MAX | 409 | 369 | 462 | 450 | 283 | 554 | 763 | 592 | 448 | 344 | 344 | 263 |
| (WY) | (1991) | (1991) | (2004) | (1998) | (2000) | (1998) | (1994) | (1996) | (1998) | (1998) | (2004) | (1998) |
| MIN | 37.5 | 73.1 | 92.4 | 68.3 | 46.5 | 110 | 182 | 126 | 51.0 | 44.7 | 24.6 | 43.3 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (1992) | (2001) | (1995) | (1995) | (1995) | (1993) | (2002) | (2001) |

04282525 NEW HAVEN RIVER AT BROOKSVILLE NEAR MIDDLEBURY, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1990 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 76,323 | | 67,175 | | | |
| ANNUAL MEAN | 209 | | 184 | | 196 | |
| HIGHEST ANNUAL MEAN | | | | | 292 1998 | |
| LOWEST ANNUAL MEAN | | | | | 128 1995 | |
| HIGHEST DAILY MEAN | 1,940 | Mar 27 | 2,200 | Jun 17 | 6,880 | Jun 27, 1998 |
| LOWEST DAILY MEAN | a 55 | Jul 14 | b 43 | Aug 19 | 12 | Sep 10, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 58 | Oct 22 | 52 | Aug 14 | 14 | Sep 1, 1999 |
| MAXIMUM PEAK FLOW | | | 2,880 | Jun 17 | c 21,700 | Jun 27, 1998 |
| MAXIMUM PEAK STAGE | | | d 8.62 | Dec 24 | f 14.18 | Jun 27, 1998 |
| INSTANTANEOUS LOW FLOW | | | 42 | Aug 19 | g 11 | Sep 10, 2002 |
| ANNUAL RUNOFF (CFSM) | 1.81 | | 1.60 | | 1.70 | |
| ANNUAL RUNOFF (INCHES) | 24.69 | | 21.73 | | 23.13 | |
| 10 PERCENT EXCEEDS | 423 | | 390 | | 396 | |
| 50 PERCENT EXCEEDS | 138 | | 97 | | 120 | |
| 90 PERCENT EXCEEDS | 65 | | 59 | | 47 | |

- a Also occurred on November 14.
- b Also occurred on August 20.
- c From rating curve extended above 5,300 ft³/s.
- d Ice jam.
- e Estimated.
- f From floodmarks.
- g Also occurred on September 11, 2002.



04282650 LITTLE OTTER CREEK AT FERRISBURG, VT

LOCATION.--Lat 44° 11'53", long 73° 14'58", Addison County, Hydrologic Unit 02010002, on left bank, downstream side of US 7 Highway bridge, 0.5 mi south of Middle Brook Road and US 7 intersection in Ferrisburg, 2.2 mi north of Town Hall in Vergennes, 2.4 mi downstream of Mud Creek.

DRAINAGE AREA.-- 57.1 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 145 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 23, 1990, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Dec 26 | 1000 | ice jam | *4.42 | Jun 19 | 0830 | *505 | 3.44 |

Minimum discharge, 2.8 ft³/s, Aug. 29, gage height, 0.75 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|------|-------|-------|---------|-------|-------|-------|
| 1 | 9.2 | 8.8 | 104 | e62 | e19 | e16 | e210 | 134 | 13 | 11 | 17 | 58 |
| 2 | 8.3 | 8.8 | 149 | e63 | e18 | e16 | e320 | 127 | 12 | 9.9 | 69 | 33 |
| 3 | 9.6 | 11 | 133 | e58 | e16 | e15 | 451 | 108 | 11 | 8.9 | 37 | 18 |
| 4 | 9.3 | 13 | 97 | e62 | e17 | e15 | 414 | 85 | 9.0 | 8.0 | 24 | 10 |
| 5 | 7.7 | 13 | 65 | e51 | e17 | e16 | 311 | 70 | 7.9 | 7.9 | 18 | 7.1 |
| 6 | 7.2 | 13 | e60 | e38 | e17 | e15 | 227 | 59 | 7.6 | 9.8 | 15 | 5.0 |
| 7 | 6.7 | 12 | e48 | e41 | e18 | e15 | 176 | 50 | 9.1 | 11 | 15 | 3.9 |
| 8 | 6.6 | 11 | e55 | e35 | e19 | e16 | 146 | 43 | 9.5 | 9.8 | 11 | 4.4 |
| 9 | 6.2 | 9.9 | e53 | e35 | e21 | e19 | 121 | 40 | 8.5 | 50 | 13 | 7.4 |
| 10 | 5.8 | 9.3 | e49 | e34 | e23 | e18 | 99 | 37 | 8.6 | 173 | 8.6 | 4.8 |
| 11 | 6.9 | 9.4 | e82 | e33 | e22 | e17 | 82 | 37 | 11 | 115 | 7.1 | 4.1 |
| 12 | 6.7 | 9.9 | e66 | e32 | e21 | e16 | 68 | 29 | 8.4 | 83 | 5.5 | 5.0 |
| 13 | 6.3 | 9.7 | e60 | e32 | e19 | e15 | 60 | 26 | 7.5 | 49 | 5.8 | 4.4 |
| 14 | 6.1 | 9.2 | e54 | e115 | e18 | e15 | 53 | 23 | 7.5 | 33 | 5.8 | 4.9 |
| 15 | 6.0 | 8.9 | e48 | e74 | e19 | e16 | 47 | 25 | 11 | 28 | 7.1 | 4.8 |
| 16 | 6.8 | 8.5 | e48 | e57 | e21 | e15 | 43 | 36 | 16 | 22 | 8.3 | 5.3 |
| 17 | 9.9 | 8.7 | e39 | e50 | e23 | e15 | 40 | 36 | 235 | 18 | 5.3 | 7.6 |
| 18 | 9.7 | 9.3 | e40 | e48 | e21 | e16 | 37 | 29 | 410 | 16 | 4.3 | 7.3 |
| 19 | 8.1 | 9.6 | e39 | e43 | e20 | e16 | 33 | 25 | 491 | 14 | 3.9 | 5.6 |
| 20 | 7.5 | 9.5 | e35 | e39 | e20 | e16 | 33 | 22 | 376 | 12 | 3.6 | 6.1 |
| 21 | 6.7 | 10 | e33 | e35 | e20 | e17 | 70 | 19 | 175 | 9.7 | 10 | 4.6 |
| 22 | 7.7 | 12 | e29 | e33 | e20 | e19 | 63 | 19 | 88 | 8.4 | 12 | 4.0 |
| 23 | 8.3 | 12 | e62 | e31 | e18 | e22 | 134 | 24 | 50 | 8.4 | 9.6 | 3.8 |
| 24 | 7.8 | 12 | e220 | e28 | e17 | e21 | 231 | 27 | 34 | 11 | 5.9 | 3.8 |
| 25 | 7.8 | 41 | e145 | e27 | e17 | e22 | 207 | 24 | 27 | 9.3 | 4.6 | 3.6 |
| 26 | 7.3 | 82 | e90 | e25 | e17 | e23 | 154 | 21 | 22 | 6.1 | 4.7 | 4.9 |
| 27 | 7.1 | 53 | e78 | e24 | e16 | e28 | 113 | 20 | 19 | 10 | 3.9 | 6.2 |
| 28 | 6.9 | 52 | e64 | e23 | e15 | e39 | 174 | 20 | 16 | 27 | 3.5 | 6.8 |
| 29 | 16 | 85 | e58 | e22 | --- | e62 | 176 | 19 | 14 | 21 | 3.1 | 6.0 |
| 30 | 8.3 | 73 | e54 | e21 | --- | e76 | 133 | 18 | 13 | 16 | 3.7 | 6.2 |
| 31 | 8.1 | --- | e58 | e20 | --- | e105 | --- | 16 | --- | 12 | 12 | --- |
| TOTAL | 242.6 | 634.5 | 2,215 | 1,291 | 529 | 752 | 4,426 | 1,268 | 2,127.6 | 828.2 | 357.3 | 256.6 |
| MEAN | 7.83 | 21.1 | 71.5 | 41.6 | 18.9 | 24.3 | 148 | 40.9 | 70.9 | 26.7 | 11.5 | 8.55 |
| MAX | 16 | 85 | 220 | 115 | 23 | 105 | 451 | 134 | 491 | 173 | 69 | 58 |
| MIN | 5.8 | 8.5 | 29 | 20 | 15 | 15 | 33 | 16 | 7.5 | 6.1 | 3.1 | 3.6 |
| CFSM | 0.14 | 0.37 | 1.25 | 0.73 | 0.33 | 0.42 | 2.58 | 0.72 | 1.24 | 0.47 | 0.20 | 0.15 |
| IN. | 0.16 | 0.41 | 1.44 | 0.84 | 0.34 | 0.49 | 2.88 | 0.83 | 1.39 | 0.54 | 0.23 | 0.17 |

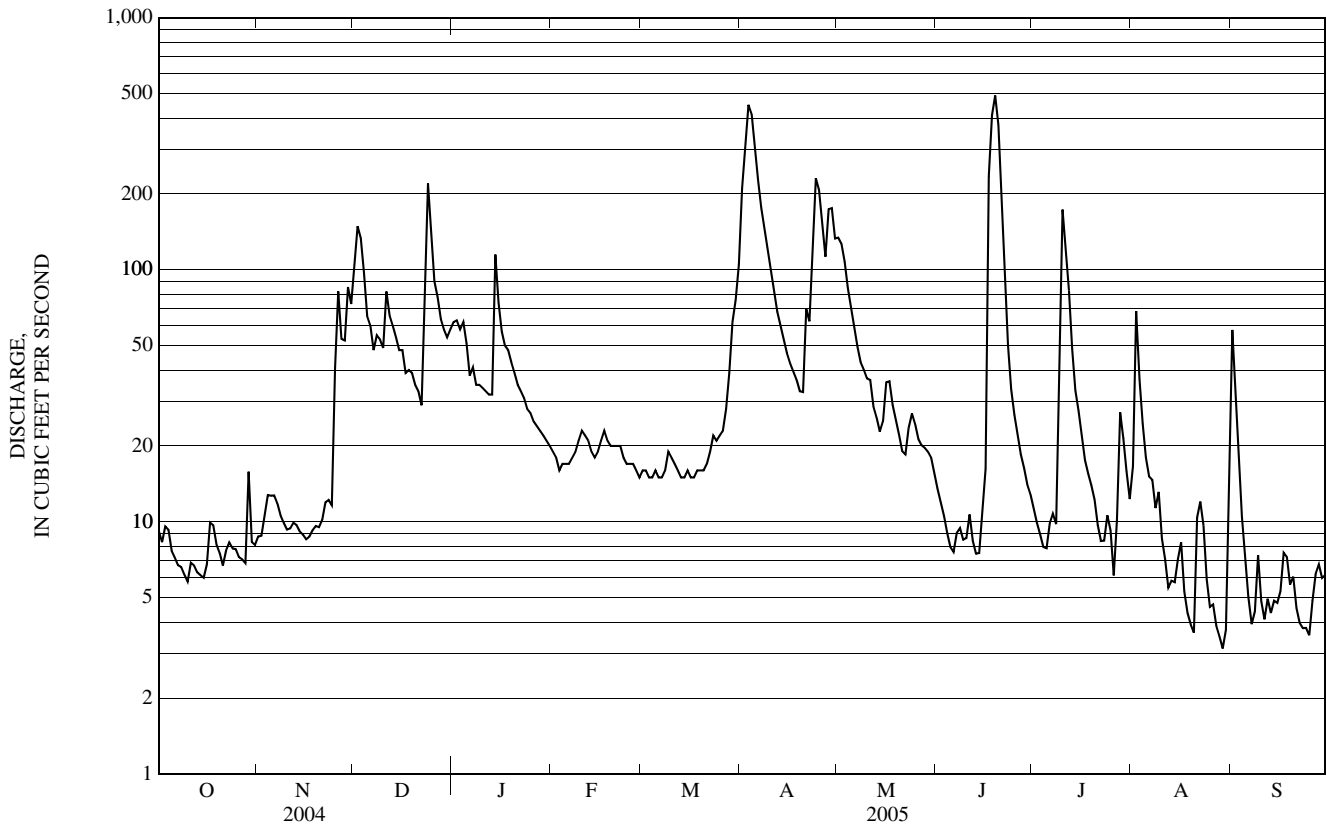
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 44.7 | 69.2 | 71.8 | 67.3 | 41.0 | 101 | 153 | 64.4 | 33.7 | 20.6 | 24.5 | 19.1 |
| MAX | 178 | 174 | 226 | 259 | 153 | 193 | 377 | 203 | 127 | 123 | 107 | 61.2 |
| (WY) | (1991) | (1991) | (1997) | (1996) | (2000) | (1990) | (2001) | (1996) | (1998) | (1998) | (1990) | (2004) |
| MIN | 2.36 | 4.96 | 9.39 | 10.3 | 12.6 | 24.3 | 34.8 | 15.2 | 4.16 | 2.83 | 1.61 | 3.02 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (2003) | (2005) | (1995) | (2001) | (1995) | (1999) | (1999) | (2001) |

04282650 LITTLE OTTER CREEK AT FERRISBURG, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1990 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 18,907.2 | | 14,927.8 | | 58.2 | |
| ANNUAL MEAN | 51.7 | | 40.9 | | 26.8 | |
| HIGHEST ANNUAL MEAN | | | | | 103 | 1996 |
| LOWEST ANNUAL MEAN | | | | | 26.8 | 2002 |
| HIGHEST DAILY MEAN | 741 | Aug 30 | 491 | Jun 19 | 1,620 | Jan 9, 1998 |
| LOWEST DAILY MEAN | 4.5 | Jul 6 | 3.1 | Aug 29 | 0.64 | Sep 10, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 6.0 | Jul 1 | 4.2 | Aug 24 | 0.77 | Sep 5, 2002 |
| MAXIMUM PEAK FLOW | | | 505 | Jun 19 | 2,210 | Jan 20, 1996 |
| MAXIMUM PEAK STAGE | | | a 4.42 | Dec 26 | a 5.77 | Feb 27, 2000 |
| INSTANTANEOUS LOW FLOW | | | 2.8 | Aug 29 | b 0.56 | Sep 9, 2002 |
| ANNUAL RUNOFF (CF5M) | 0.905 | | 0.716 | | 1.02 | |
| ANNUAL RUNOFF (INCHES) | 12.32 | | 9.73 | | 13.85 | |
| 10 PERCENT EXCEEDS | 121 | | 93 | | 140 | |
| 50 PERCENT EXCEEDS | 24 | | 18 | | 22 | |
| 90 PERCENT EXCEEDS | 8.4 | | 6.1 | | 4.6 | |

a Ice jam.
 b Also occurred on September 10, 2002.
 c Estimated.



04282780 LEWIS CREEK NEAR NORTH FERRISBURG, VT

LOCATION.--Lat 44° 14'57", long 73° 13'44", Addison County, Hydrologic Unit 02010002, on right bank, 100 ft upstream of US 7 Highway bridge, 1.1 mi southwest of Four Winds Road and Hollow Road intersection in North Ferrisburg, 1.2 mi south of Mount Philo Peak, and 5.7 mi north of Town Hall in Vergennes.

DRAINAGE AREA.--77.2 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year. Published as "at North Ferrisburg" prior to October 1996.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 105 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Dec 24 | 1330 | 1,240 | 4.42 | Jun 18 | 1400 | 998 | 4.20 |
| Apr 3 | 0045 | *1,310 | *4.48 | Jul 10 | 0545 | 1,170 | 4.36 |

Minimum discharge, 13 ft³/s, Oct. 13, 14, gage height, 1.63 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 19 | 18 | 166 | e193 | e72 | e62 | 632 | 205 | 37 | 36 | 42 | 222 |
| 2 | 18 | 17 | 246 | e167 | e67 | e61 | 843 | 179 | 33 | 33 | 156 | 78 |
| 3 | 22 | 23 | 137 | e194 | e61 | e57 | 1,130 | 153 | 30 | 30 | 72 | 51 |
| 4 | 18 | 28 | 105 | e188 | e64 | e60 | 793 | 134 | 28 | 28 | 52 | 42 |
| 5 | 16 | 23 | e86 | e154 | e61 | e62 | 480 | 123 | 27 | 34 | 45 | 37 |
| 6 | 16 | 22 | e74 | e130 | e59 | e66 | 354 | 107 | 26 | 87 | 41 | 33 |
| 7 | 16 | 22 | e84 | e132 | e65 | e62 | 320 | 98 | 27 | 57 | 36 | 30 |
| 8 | 15 | 20 | 116 | e119 | e69 | e67 | 289 | 91 | 26 | 42 | 32 | 26 |
| 9 | 15 | 18 | 111 | e118 | e88 | e70 | 227 | 85 | 23 | 329 | 28 | 27 |
| 10 | 17 | 17 | 101 | e117 | e84 | e73 | 191 | 78 | 27 | 837 | 25 | 24 |
| 11 | 16 | 17 | 312 | e106 | e80 | e69 | 164 | 73 | 26 | 200 | 23 | 21 |
| 12 | 15 | 18 | 275 | e101 | e76 | e62 | 142 | 66 | 25 | 120 | 20 | 20 |
| 13 | 14 | e16 | 192 | e110 | e70 | e60 | 130 | 61 | 24 | 90 | 20 | 18 |
| 14 | 13 | e17 | 169 | e400 | e66 | e57 | 119 | 59 | 37 | 75 | 21 | 17 |
| 15 | 19 | e18 | e135 | e235 | e78 | e58 | 108 | 64 | 87 | 66 | 24 | 15 |
| 16 | 21 | e18 | e137 | e195 | e85 | e59 | 100 | 77 | 62 | 57 | 20 | 17 |
| 17 | 25 | 17 | e139 | e136 | e98 | e59 | 95 | 72 | 534 | 49 | 17 | 21 |
| 18 | 22 | 18 | e135 | e120 | e81 | e60 | 92 | 61 | 742 | 44 | 15 | 29 |
| 19 | 19 | 18 | e128 | e115 | e78 | e61 | 87 | 57 | 343 | 38 | 14 | 27 |
| 20 | 18 | 17 | e114 | e108 | e75 | e62 | 90 | 53 | 190 | 33 | 14 | 23 |
| 21 | 17 | 23 | e103 | e102 | e78 | e66 | 159 | 49 | 135 | 29 | 47 | 23 |
| 22 | 16 | 26 | e115 | e100 | e76 | e80 | 117 | 54 | 129 | 62 | 40 | 18 |
| 23 | 16 | 24 | e240 | e93 | e68 | e86 | 252 | 60 | 104 | 66 | 28 | 18 |
| 24 | 15 | 23 | e770 | e90 | e66 | e84 | 316 | 76 | 80 | 40 | 25 | 19 |
| 25 | 16 | 88 | e315 | e89 | e64 | e92 | 222 | 65 | 66 | 31 | 23 | 17 |
| 26 | 15 | 129 | e265 | e88 | e63 | e92 | 171 | 55 | 57 | 27 | 20 | 18 |
| 27 | 14 | 66 | e205 | e87 | e61 | e108 | 148 | 55 | 50 | 112 | 18 | 52 |
| 28 | 14 | 63 | e187 | e83 | e60 | e182 | 279 | 54 | 43 | 141 | 17 | 38 |
| 29 | 15 | 127 | e163 | e79 | --- | e270 | 245 | 50 | 41 | 62 | 18 | 30 |
| 30 | 15 | 83 | e145 | e79 | --- | 319 | 180 | 45 | 40 | 44 | 16 | 42 |
| 31 | 18 | --- | e136 | e74 | --- | 395 | --- | 41 | --- | 36 | 71 | --- |
| TOTAL | 525 | 1,034 | 5,606 | 4,102 | 2,013 | 3,021 | 8,475 | 2,500 | 3,099 | 2,935 | 1,040 | 1,053 |
| MEAN | 16.9 | 34.5 | 181 | 132 | 71.9 | 97.5 | 282 | 80.6 | 103 | 94.7 | 33.5 | 35.1 |
| MAX | 25 | 129 | 770 | 400 | 98 | 395 | 1,130 | 205 | 742 | 837 | 156 | 222 |
| MIN | 13 | 16 | 74 | 74 | 59 | 57 | 87 | 41 | 23 | 27 | 14 | 15 |
| CFSM | 0.22 | 0.45 | 2.34 | 1.71 | 0.93 | 1.26 | 3.66 | 1.04 | 1.34 | 1.23 | 0.43 | 0.45 |
| IN. | 0.25 | 0.50 | 2.70 | 1.98 | 0.97 | 1.46 | 4.08 | 1.20 | 1.49 | 1.41 | 0.50 | 0.51 |

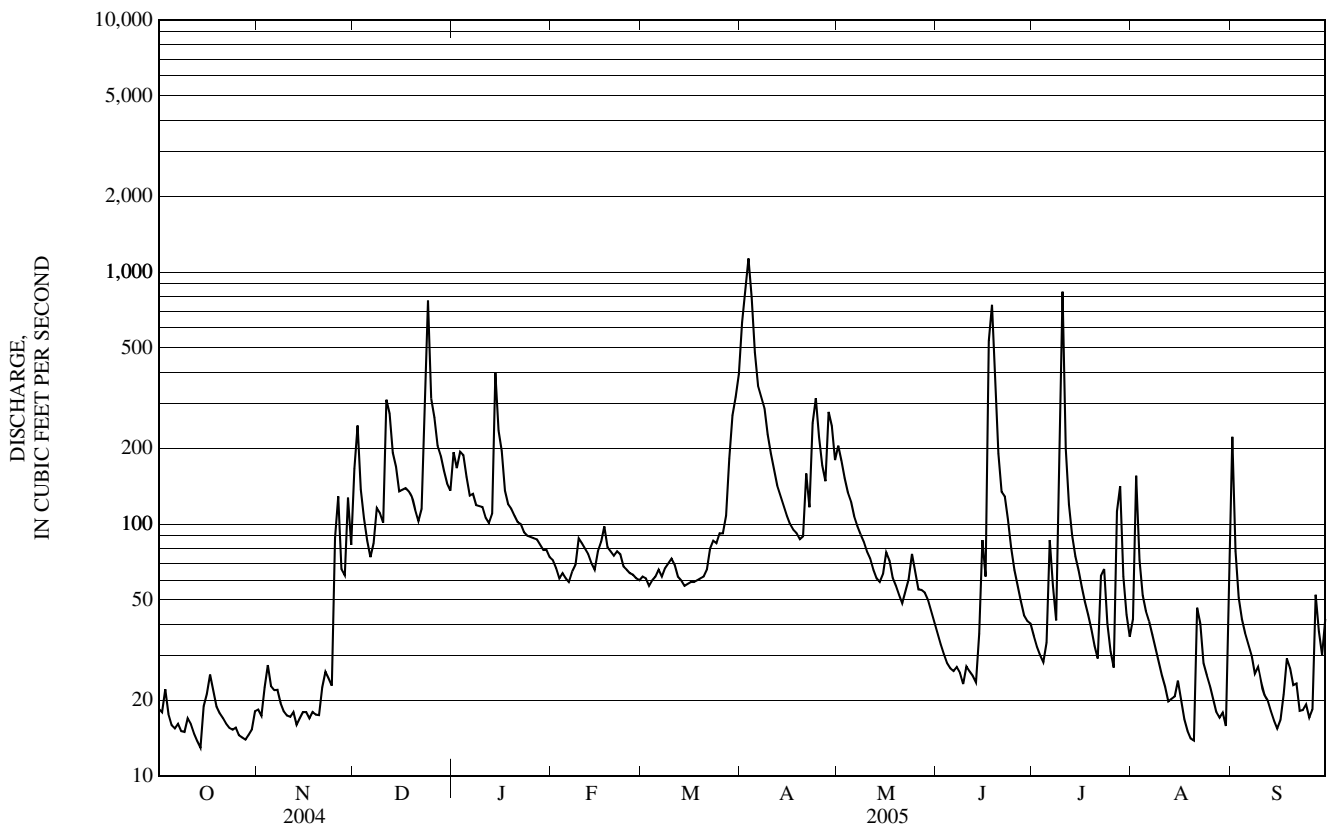
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 75.7 | 100 | 118 | 104 | 83.5 | 165 | 245 | 124 | 64.9 | 46.2 | 38.8 | 36.2 |
| MAX | 247 | 238 | 300 | 259 | 251 | 299 | 485 | 349 | 151 | 182 | 139 | 92.0 |
| (WY) | (1991) | (1991) | (1997) | (1996) | (2000) | (1999) | (2001) | (1996) | (1996) | (1998) | (1990) | (1998) |
| MIN | 9.18 | 16.1 | 22.1 | 22.6 | 30.1 | 47.3 | 77.1 | 40.4 | 15.7 | 9.98 | 7.44 | 10.5 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (2003) | (2001) | (1995) | (2001) | (1995) | (1999) | (1999) | (2001) |

04282780 LEWIS CREEK NEAR NORTH FERRISBURG, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1990 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 31,654 | | 35,403 | | 98.9 | |
| ANNUAL MEAN | 86.5 | | 97.0 | | 152 | |
| HIGHEST ANNUAL MEAN | | | | | 54.2 | |
| LOWEST ANNUAL MEAN | | | | | 195 | |
| HIGHEST DAILY MEAN | 795 | May 24 | 1,130 | Apr 3 | 2,500 | Feb 28, 2000 |
| LOWEST DAILY MEAN | 13 | Oct 14 | 13 | Oct 14 | 4.2 | Sep 4, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 15 | Oct 24 | 15 | Oct 24 | 4.5 | Aug 31, 1999 |
| MAXIMUM PEAK FLOW | | | 1,310 | Apr 3 | 3,380 | Feb 28, 2000 |
| MAXIMUM PEAK STAGE | | | 4.48 | Apr 3 | a 6.20 | Feb 22, 1997 |
| INSTANTANEOUS LOW FLOW | | | b 13 | Oct 13 | c 4.0 | Sep 3, 1999 |
| ANNUAL RUNOFF (CF5M) | 1.12 | | 1.26 | | 1.28 | |
| ANNUAL RUNOFF (INCHES) | 15.25 | | 17.06 | | 17.41 | |
| 10 PERCENT EXCEEDS | 188 | | 194 | | 210 | |
| 50 PERCENT EXCEEDS | 53 | | 62 | | 55 | |
| 90 PERCENT EXCEEDS | 18 | | 17 | | 16 | |

- a Ice jam.
- b Also occurred on Oct. 14.
- c Also occurred on Sept. 4, 5, 1999.
- e Estimated.



04282795 LAPLATTE RIVER AT SHELBURNE FALLS, VT

LOCATION.--Lat 44° 22'12", long 73° 13'00", Chittenden County, Hydrologic Unit 02010003, on left bank, 150 ft upstream of small right bank tributary, 300 ft upstream of Falls Road bridge, 500 ft southwest of Falls Road and Thomas Road intersection in Shelburne Falls, 0.8 mi southeast of Town Hall in Shelburne, 3.4 mi above mouth.

DRAINAGE AREA.--44.6 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 23, 1990, nonrecording gage at site 100 ft downstream.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Apr 2 | 1800 | 666 | 4.16 | Jul 10 | 0245 | *705 | *4.26 |

Minimum discharge, 2.2 ft³/s, Aug. 28, gage height, 1.02 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 1 | 5.5 | 7.7 | 98 | e72 | e11 | e18 | e360 | 133 | 12 | 7.0 | 15 | 87 |
| 2 | 5.3 | 8.1 | 180 | e62 | e10 | e18 | 473 | 86 | 11 | 6.5 | 23 | 29 |
| 3 | 5.4 | 10 | 70 | e73 | e9.8 | e17 | 569 | 70 | 10 | 5.5 | 24 | 15 |
| 4 | 5.3 | 11 | 47 | e64 | e9.7 | e17 | 453 | 60 | 8.4 | 4.8 | 14 | 11 |
| 5 | 4.8 | 9.8 | 35 | e39 | e9.7 | e17 | 315 | 51 | 7.8 | 17 | 12 | 8.3 |
| 6 | 4.6 | 8.8 | e28 | e30 | e9.6 | e18 | 188 | 44 | 7.6 | 148 | 11 | 6.9 |
| 7 | 4.5 | 8.0 | e25 | e28 | e10 | e17 | 140 | 39 | 8.3 | 50 | 9.0 | 6.2 |
| 8 | 4.6 | 7.3 | e51 | e25 | e12 | e21 | 125 | 35 | 6.9 | 25 | 7.8 | 5.4 |
| 9 | 3.9 | 7.4 | e65 | e25 | e24 | e29 | 97 | 33 | 6.5 | 226 | 7.2 | 5.2 |
| 10 | 3.8 | 7.0 | e55 | e26 | e29 | e32 | 77 | 29 | 7.4 | 636 | 6.4 | 5.5 |
| 11 | 3.8 | 6.2 | e84 | e23 | e22 | e23 | 64 | 26 | 7.3 | 316 | 5.7 | 4.4 |
| 12 | 3.8 | 6.1 | e73 | e22 | e20 | e22 | 53 | 23 | 6.5 | 87 | 4.9 | 3.9 |
| 13 | 3.9 | 5.9 | e62 | e51 | e17 | e21 | 47 | 20 | 5.9 | 49 | 4.6 | 3.6 |
| 14 | 3.7 | 6.2 | e55 | e120 | e15 | e23 | 42 | 18 | 6.9 | 35 | 4.7 | 3.2 |
| 15 | 3.8 | 5.6 | e48 | e95 | e18 | e25 | 37 | 19 | 18 | 38 | 5.1 | 3.1 |
| 16 | 6.4 | 5.2 | e50 | e45 | e21 | e25 | 33 | 26 | 17 | 30 | 5.0 | 3.4 |
| 17 | 11 | 5.5 | e50 | e29 | e23 | e27 | 31 | 23 | 175 | 22 | 4.1 | 5.4 |
| 18 | 7.9 | 6.3 | e45 | e20 | e22 | e28 | 29 | 19 | 292 | 19 | 3.4 | 40 |
| 19 | 6.5 | 6.5 | e39 | e18 | e21 | e31 | 27 | 17 | 141 | 15 | 2.9 | 21 |
| 20 | 5.8 | 6.7 | e32 | e17 | e20 | e36 | 29 | 15 | 60 | 13 | 2.7 | 14 |
| 21 | 5.6 | 9.9 | e25 | e16 | e20 | e56 | 102 | 14 | 35 | 10 | 5.1 | 12 |
| 22 | 5.2 | 13 | e21 | e15 | e19 | e78 | 58 | 16 | 28 | 18 | 8.2 | 10 |
| 23 | 5.1 | 10 | e76 | e13 | e18 | e52 | 178 | 25 | 23 | 55 | 5.2 | 9.1 |
| 24 | 4.8 | 9.3 | e335 | e13 | e18 | e56 | 333 | 42 | 18 | 24 | 4.8 | 8.7 |
| 25 | 4.6 | 44 | e220 | e14 | e17 | e52 | 154 | 28 | 13 | 13 | 4.3 | 7.4 |
| 26 | 4.7 | 103 | e120 | e13 | e17 | e61 | 91 | 22 | 11 | 10 | 3.6 | 7.8 |
| 27 | 4.6 | 36 | e80 | e12 | e17 | e78 | 74 | 21 | 9.9 | 71 | 3.0 | 28 |
| 28 | 4.2 | 27 | e66 | e12 | e16 | e130 | 253 | 21 | 8.7 | 163 | 2.8 | 20 |
| 29 | 4.3 | 78 | e60 | e12 | --- | e210 | 182 | 18 | 7.6 | 46 | 2.7 | 15 |
| 30 | 4.7 | 43 | e52 | e12 | --- | e200 | 101 | 15 | 7.1 | 24 | 2.9 | 22 |
| 31 | 5.5 | --- | e57 | e11 | --- | e220 | --- | 15 | --- | 16 | 30 | --- |
| TOTAL | 157.6 | 518.5 | 2,304 | 1,027 | 475.8 | 1,658 | 4,715 | 1,023 | 976.8 | 2,199.8 | 245.1 | 421.5 |
| MEAN | 5.08 | 17.3 | 74.3 | 33.1 | 17.0 | 53.5 | 157 | 33.0 | 32.6 | 71.0 | 7.91 | 14.1 |
| MAX | 11 | 103 | 335 | 120 | 29 | 220 | 569 | 133 | 292 | 636 | 30 | 87 |
| MIN | 3.7 | 5.2 | 21 | 11 | 9.6 | 17 | 27 | 14 | 5.9 | 4.8 | 2.7 | 3.1 |
| CFM | 0.11 | 0.39 | 1.67 | 0.74 | 0.38 | 1.20 | 3.52 | 0.74 | 0.73 | 1.59 | 0.18 | 0.32 |
| IN. | 0.13 | 0.43 | 1.92 | 0.86 | 0.40 | 1.38 | 3.93 | 0.85 | 0.81 | 1.83 | 0.20 | 0.35 |

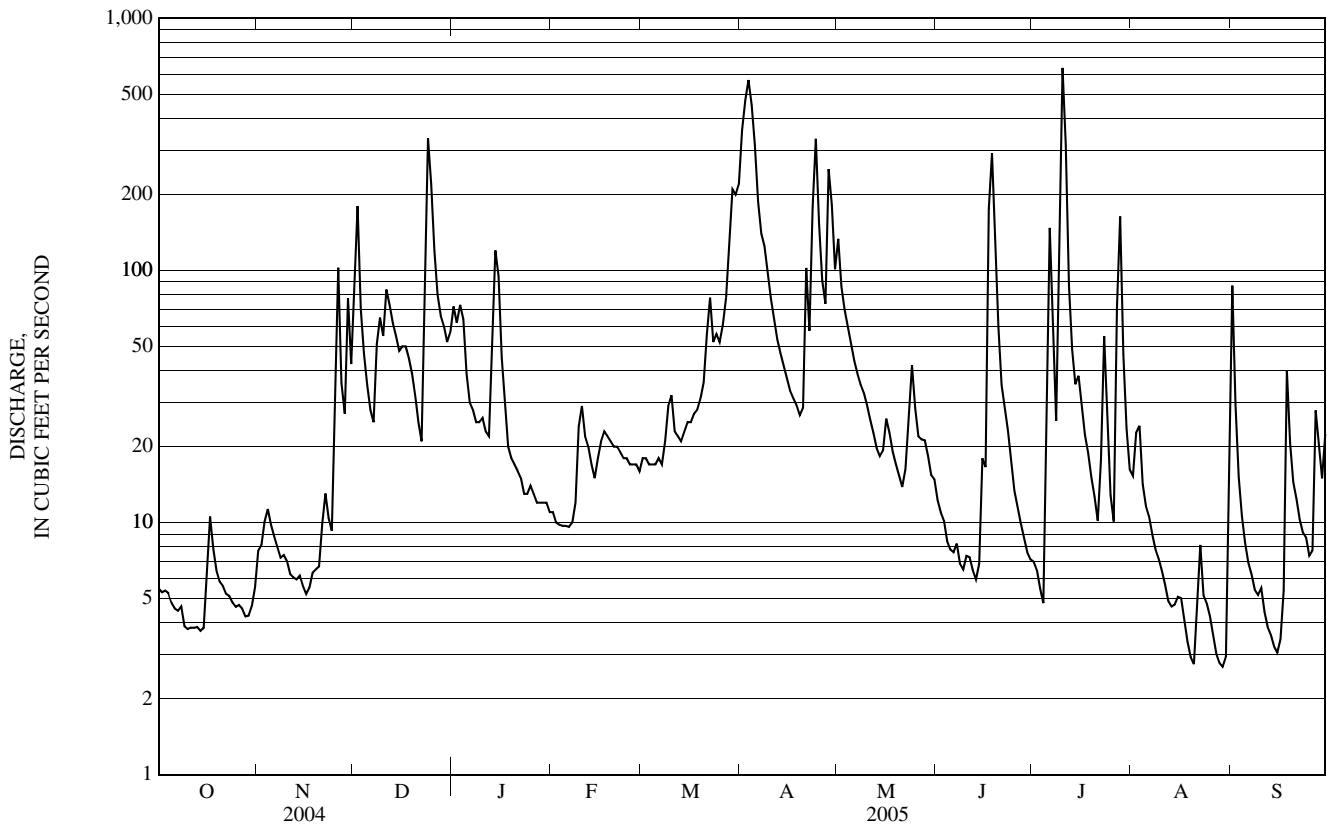
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 33.2 | 53.1 | 49.7 | 43.1 | 30.1 | 73.2 | 126 | 57.1 | 26.3 | 24.5 | 18.7 | 15.4 |
| MAX | 113 | 135 | 150 | 159 | 106 | 125 | 295 | 181 | 79.4 | 146 | 99.7 | 60.4 |
| (WY) | (1991) | (1991) | (1997) | (1996) | (2000) | (2003) | (2001) | (1996) | (1996) | (1998) | (1990) | (1998) |
| MIN | 2.69 | 4.03 | 5.05 | 6.17 | 8.61 | 26.7 | 28.8 | 15.0 | 4.86 | 1.69 | 1.58 | 2.62 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (1993) | (2001) | (1995) | (1998) | (1999) | (1995) | (2001) | (1995) |

04282795 LAPLATTE RIVER AT SHELBURNE FALLS, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1990 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 14,522.6 | | 15,722.1 | | | |
| ANNUAL MEAN | 39.7 | | 43.1 | | 45.3 | |
| HIGHEST ANNUAL MEAN | | | | | 70.7 | 1996 |
| LOWEST ANNUAL MEAN | | | | | 21.8 | 1995 |
| HIGHEST DAILY MEAN | 462 | Sep 10 | 636 | Jul 10 | 1,410 | Dec 2, 1996 |
| LOWEST DAILY MEAN | 3.7 | Oct 14 | a 2.7 | Aug 20 | 0.23 | Sep 4, 1995 |
| ANNUAL SEVEN-DAY MINIMUM | 3.8 | Oct 9 | 3.4 | Aug 24 | 0.33 | Aug 31, 1995 |
| MAXIMUM PEAK FLOW | | | 705 | Jul 10 | b 2,640 | Jan 19, 1996 |
| MAXIMUM PEAK STAGE | | | 4.26 | Jul 10 | c 9.50 | Feb 20, 1994 |
| INSTANTANEOUS LOW FLOW | | | 2.2 | Aug 28 | d 0.18 | Sep 3, 1995 |
| ANNUAL RUNOFF (CFSM) | 0.890 | | 0.966 | | 1.02 | |
| ANNUAL RUNOFF (INCHES) | 12.11 | | 13.11 | | 13.81 | |
| 10 PERCENT EXCEEDS | 91 | | 96 | | 105 | |
| 50 PERCENT EXCEEDS | 18 | | 18 | | 18 | |
| 90 PERCENT EXCEEDS | 5.8 | | 4.8 | | 3.6 | |

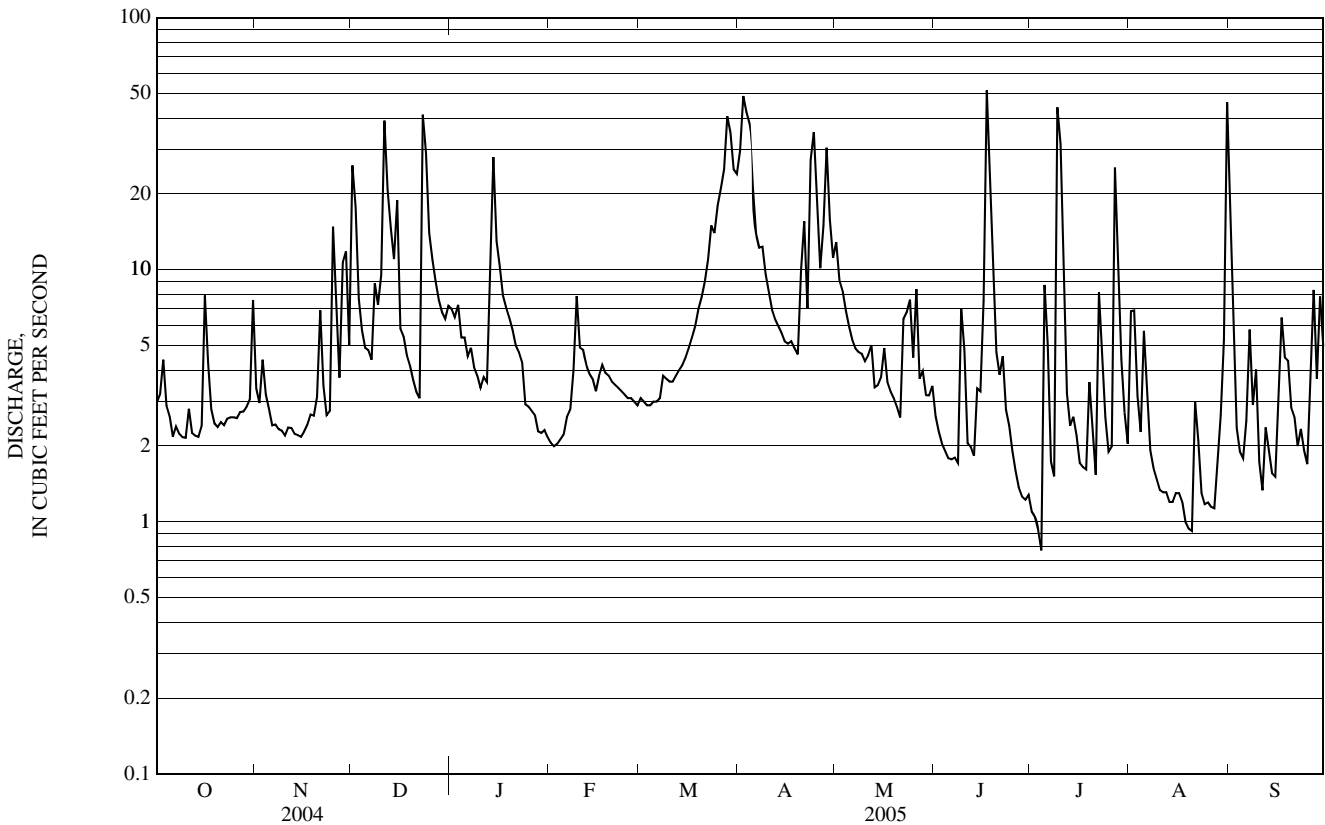
- a Also occurred on Aug. 29.
- b From rating curve extended above 750 ft³/s.
- c Ice jam.
- d Also occurred on Sept. 4, 1995.
- e Estimated.



04282813 POTASH BROOK AT QUEEN CITY PARK ROAD, NEAR BURLINGTON, VT—Continued

| SUMMARY STATISTICS | FOR 2005 WATER YEAR | | WATER YEARS 2004 - 2005 | |
|--------------------------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 2,404.46 | | | |
| ANNUAL MEAN | 6.59 | | 6.59 | |
| HIGHEST ANNUAL MEAN | | | 6.59 | 2005 |
| LOWEST ANNUAL MEAN | | | 6.59 | 2005 |
| HIGHEST DAILY MEAN | 51 | Jun 17 | 204 | Aug 31, 2004 |
| LOWEST DAILY MEAN | 0.77 | Jul 4 | 0.77 | Jul 4, 2005 |
| ANNUAL SEVEN-DAY MINIMUM | 1.1 | Jun 28 | 1.1 | Jun 28, 2005 |
| MAXIMUM PEAK FLOW | 121 | Jul 5 | a 582 | Aug 31, 2004 |
| MAXIMUM PEAK STAGE | b 3.96 | Dec 29 | 4.86 | Aug 31, 2004 |
| INSTANTANEOUS LOW FLOW | 0.72 | Jul 4 | 0.72 | Jul 4, 2005 |
| ANNUAL RUNOFF (CFSM) | 0.917 | | 0.917 | |
| ANNUAL RUNOFF (INCHES) | 12.46 | | 12.47 | |
| 10 PERCENT EXCEEDS | 15 | | 15 | |
| 50 PERCENT EXCEEDS | 3.6 | | 3.6 | |
| 90 PERCENT EXCEEDS | 1.7 | | 1.7 | |

a From rating curve extended above 79 ft³/s.
 b Ice jam.
 e Estimated.



04282815 ENGLSBY BROOK AT BURLINGTON, VT

LOCATION.--Lat 44° 27' 28", long 73° 13' 11", Chittenden County, Hydrologic Unit 02010003, on right bank, 125 ft downstream from Vermont Railroad culvert, 0.25 mi upstream from mouth, 0.35 mi downstream from Pine Street culvert, 0.8 mi northwest from junction of US 7 and Interstate 189, 1.3 mi south of City Hall in Burlington.

DRAINAGE AREA.-- About 0.9 mi². Drainage area affected by stormwater diversions.

PERIOD OF RECORD.--Discharge records: October 1999 to current year. Water-quality records: October 1999 to September 2001.

GAGE.--Concrete control with v-notch weir, water-stage recorder, and crest-stage gage. Elevation of gage is 105 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and periods of shifting control (Oct. 1 to June 17), which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 206 ft³/s, August 31, 2004, gage-height 5.18 ft; no flow for many days in water years 2000-2005.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 46 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Jul 5 | 1655 | *89 | *4.15 | No other peak greater than base discharge. | | | |

Minimum discharge, 0.00 ft³/s, on many days, gage height, 1.06 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|
| 1 | 0.23 | 0.01 | 3.1 | 0.99 | e0.11 | e0.01 | 2.4 | 0.75 | 0.01 | 0.01 | 1.7 | 0.43 |
| 2 | 0.43 | 0.02 | 0.75 | 0.44 | e0.16 | e0.01 | 5.4 | 0.47 | 0.01 | 0.01 | 0.28 | 0.02 |
| 3 | 0.14 | 0.09 | 0.43 | 0.46 | e0.17 | e0.01 | 4.8 | 0.62 | 0.01 | 0.01 | 0.05 | 0.01 |
| 4 | 0.17 | 0.01 | 0.27 | 0.26 | e0.18 | e0.01 | 4.2 | 0.54 | 0.01 | 0.01 | 0.01 | 0.00 |
| 5 | 0.19 | 0.02 | 0.21 | 0.18 | e0.22 | e0.01 | 2.0 | 0.23 | 0.01 | 2.7 | 0.90 | 0.00 |
| 6 | 0.19 | 0.02 | 0.13 | 0.15 | 0.27 | e0.01 | 1.1 | 0.23 | 0.01 | 0.05 | 0.02 | 0.00 |
| 7 | 0.12 | 0.03 | 0.53 | 0.14 | 0.41 | e0.01 | 0.73 | 0.24 | 0.02 | 0.02 | 0.01 | 0.00 |
| 8 | 0.15 | 0.02 | 0.52 | 0.11 | 2.3 | e0.01 | 0.58 | 0.48 | 0.02 | 0.02 | 0.00 | 0.13 |
| 9 | 0.13 | 0.01 | 0.30 | 0.11 | e0.85 | e0.01 | 0.29 | 0.19 | 1.3 | 5.5 | 0.00 | 0.01 |
| 10 | 0.11 | 0.01 | 1.5 | 0.11 | e0.36 | e0.01 | 0.19 | 0.15 | 0.13 | 1.3 | 0.01 | 0.00 |
| 11 | 0.17 | 0.01 | 5.7 | 0.09 | e0.32 | e0.01 | 0.22 | 0.28 | 0.04 | 0.39 | 0.00 | 0.00 |
| 12 | 0.11 | 0.01 | 2.3 | 0.18 | e0.18 | e0.01 | 0.23 | 0.15 | 0.03 | 0.52 | 0.00 | 0.00 |
| 13 | 0.04 | 0.01 | 2.0 | 2.7 | e0.16 | 0.10 | 0.20 | 0.07 | 0.03 | 0.44 | 0.00 | 0.00 |
| 14 | 0.03 | 0.01 | 1.2 | 8.0 | e0.14 | 0.04 | 0.18 | 0.09 | 0.57 | 0.32 | 0.05 | 0.00 |
| 15 | 0.02 | 0.01 | 0.75 | e1.7 | e0.77 | 0.10 | 0.17 | 0.09 | 0.17 | 0.03 | 0.00 | 0.00 |
| 16 | 0.78 | 0.01 | 0.55 | e0.98 | e1.2 | 0.12 | 0.15 | 0.15 | 1.6 | 0.00 | 0.00 | 0.40 |
| 17 | e0.03 | 0.01 | 0.45 | e0.59 | e0.85 | 0.08 | 0.14 | 0.03 | 5.5 | 0.00 | 0.00 | 0.70 |
| 18 | e0.01 | 0.01 | 0.33 | e0.27 | e0.44 | 0.11 | 0.14 | 0.03 | 2.4 | 0.00 | 0.19 | 0.03 |
| 19 | e0.01 | 0.01 | 0.31 | e0.17 | e0.36 | 0.10 | 0.14 | 0.03 | 0.51 | 0.75 | 0.01 | 0.01 |
| 20 | e0.01 | 0.29 | 0.24 | e0.11 | e0.18 | 0.13 | 1.8 | 0.02 | 0.44 | 0.02 | 0.01 | 0.04 |
| 21 | e0.01 | 0.35 | 0.19 | e0.08 | e0.16 | e0.21 | 0.31 | 0.02 | 0.70 | 0.00 | 0.06 | 0.01 |
| 22 | e0.01 | 0.02 | 0.21 | e0.08 | e0.31 | e0.65 | 0.11 | 0.67 | 0.69 | 1.8 | 0.00 | 0.01 |
| 23 | 0.00 | 0.01 | 5.5 | e0.07 | e0.01 | e0.39 | 4.8 | 0.83 | 0.06 | 0.11 | 0.00 | 0.01 |
| 24 | 0.00 | 0.03 | 3.0 | e0.05 | e0.01 | e0.53 | 5.3 | 0.23 | 0.04 | 0.05 | 0.00 | 0.01 |
| 25 | 0.00 | 2.5 | 0.97 | e0.04 | e0.01 | 0.97 | 1.4 | 0.07 | 0.03 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.36 | 0.46 | e0.04 | e0.01 | e0.62 | 1.1 | 0.05 | 0.03 | 0.14 | 0.00 | 0.49 |
| 27 | 0.00 | 0.15 | 0.21 | e0.03 | e0.01 | 1.8 | 3.7 | 0.10 | 0.02 | 3.7 | 0.00 | 0.27 |
| 28 | 0.00 | 2.3 | 0.14 | e0.02 | e0.01 | 4.0 | 4.0 | 0.06 | 0.02 | 0.27 | 0.35 | 0.02 |
| 29 | 0.00 | 0.86 | 0.11 | e0.01 | --- | 3.1 | 1.7 | 0.02 | 0.02 | 0.04 | 0.00 | 1.3 |
| 30 | 0.00 | 0.27 | 0.08 | e0.01 | --- | 2.3 | 1.1 | 0.26 | 0.02 | 0.02 | 0.64 | 0.09 |
| 31 | 0.69 | --- | 0.65 | e0.02 | --- | 1.5 | --- | 0.04 | --- | 0.01 | 6.3 | --- |
| TOTAL | 3.78 | 7.47 | 33.09 | 18.19 | 10.16 | 16.97 | 48.58 | 7.19 | 14.45 | 18.24 | 10.59 | 3.99 |
| MEAN | 0.12 | 0.25 | 1.07 | 0.59 | 0.36 | 0.55 | 1.62 | 0.23 | 0.48 | 0.59 | 0.34 | 0.13 |
| MAX | 0.78 | 2.5 | 5.7 | 8.0 | 2.3 | 4.0 | 5.4 | 0.83 | 5.5 | 5.5 | 6.3 | 1.3 |
| MIN | 0.00 | 0.01 | 0.08 | 0.01 | 0.01 | 0.01 | 0.11 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 |

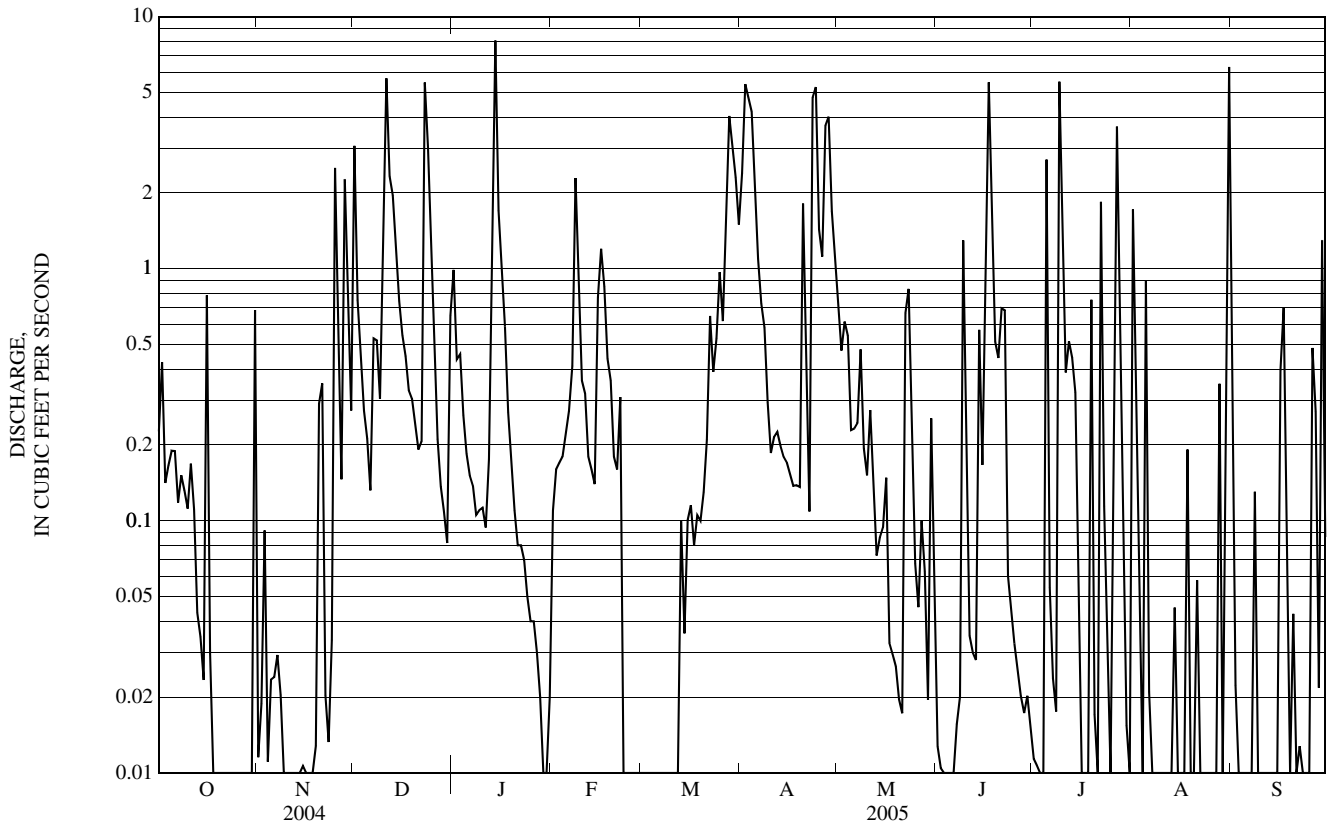
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.30 | 0.52 | 0.68 | 0.28 | 0.52 | 0.69 | 1.47 | 0.82 | 0.56 | 0.43 | 0.61 | 0.30 |
| MAX | 0.68 | 1.11 | 1.49 | 0.59 | 1.59 | 1.01 | 2.99 | 2.13 | 1.49 | 1.11 | 2.67 | 0.63 |
| (WY) | (2004) | (2004) | (2004) | (2005) | (2000) | (2003) | (2001) | (2000) | (2002) | (2004) | (2004) | (2002) |
| MIN | 0.02 | 0.17 | 0.12 | 0.09 | 0.01 | 0.54 | 0.59 | 0.21 | 0.22 | 0.02 | 0.03 | 0.13 |
| (WY) | (2002) | (2002) | (2002) | (2001) | (2004) | (2002) | (2002) | (2001) | (2001) | (2001) | (2002) | (2001) |

04282815 ENGLSBY BROOK AT BURLINGTON, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 2000 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 272.48 | | 192.70 | | 0.60 | |
| ANNUAL MEAN | 0.74 | | 0.53 | | 0.40 | |
| HIGHEST ANNUAL MEAN | | | | | 0.90 | 2004 |
| LOWEST ANNUAL MEAN | | | | | 0.40 | 2003 |
| HIGHEST DAILY MEAN | 33 | Aug 31 | 8.0 | Jan 14 | 33 | Aug 31, 2004 |
| LOWEST DAILY MEAN | a 0.00 | Oct 23 | a 0.00 | Oct 23 | a 0.00 | Oct 2, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 | Oct 23 | 0.00 | Oct 23 | 0.00 | Jan 17, 2000 |
| MAXIMUM PEAK FLOW | | | b 89 | Jul 5 | b 206 | Aug 31, 2004 |
| MAXIMUM PEAK STAGE | | | 4.15 | Jul 5 | 5.18 | Aug 31, 2004 |
| 10 PERCENT EXCEEDS | 1.6 | | 1.5 | | 1.5 | |
| 50 PERCENT EXCEEDS | 0.21 | | 0.11 | | 0.15 | |
| 90 PERCENT EXCEEDS | 0.01 | | 0.00 | | 0.00 | |

- a Also occurred on many days as noted in the Extremes paragraph above.
- b From rating curve extended above 10 ft³/s on basis of culvert computation at gage height 4.84 ft.
- c Estimated.



RESERVOIRS IN WINOOSKI RIVER BASIN ABOVE MONTPELIER, VT

04283500 EAST BARRE DETENTION RESERVOIR AT EAST BARRE, VT

LOCATION.--Lat 44° 09'18", long 72° 26'42", Washington County, Hydrologic Unit 0201003, at dam on Jail Branch at East Barre, 4.5 mi upstream from mouth.

DRAINAGE AREA.--38.8 mi².

PERIOD OF RECORD.--Gage heights and contents: Monthend readings only, February 1936 (in WSP 1307), March and April 1936 (in WSP 798), May 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage at National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to August 30, 1960, nonrecording gage, and August 30 to September 30, 1960, water-stage recorder, at present site at datum 1,127.9 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers in 1935 for flood control. Usable capacity, 525 million ft³ between elevation 1,124.9 ft (bottom of outlet opening) and 1,165.0 ft (crest of spillway). Dam has no gates; below elevation 1,165.0 ft, outflow from reservoir is dependent on capacity of outlet opening near base of dam. Outlet-opening enlargement and reservoir-construction

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,163.9 ft, present datum, March 22, 1936; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,148.52 ft, April 4; minimum not determined.

MONTHEND ELEVATION AND CONTENTS AT 2400
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Elevation (feet) | Contents (millions of cubic feet) | Change in Contents (millions of cubic feet) | Change in Contents (Equivalent cubic feet per second) |
|-------------|---------------------|---|--|---|
| Sep. 30 | 1,130.98 | 6.8 | -- | -- |
| Oct. 31 | 1,131.01 | 6.9 | +0.1 | +0.04 |
| Nov. 30 | 1,131.08 | 7.0 | +0.1 | +0.04 |
| Dec. 31 | 1,131.94 | 8.2 | +0.8 | +0.30 |
| CAL YR 2004 | -- | -- | +0.1 | 0.00 |
| Jan. 31 | 1,130.87 | 6.7 | -1.5 | -0.56 |
| Feb. 29 | 1,130.67 | 6.4 | -0.3 | -0.12 |
| Mar. 31 | 1,136.22 | 16.1 | +9.7 | +3.62 |
| Apr. 30 | 1,136.70 | 17.5 | +1.4 | +0.54 |
| May 31 | 1,132.88 | 9.6 | -7.9 | -2.95 |
| Jun. 30 | 1,130.69 | 6.4 | -3.2 | -1.23 |
| Jul. 31 | 1,130.65 | 6.4 | 0.0 | 0.00 |
| Aug. 31 | 1,134.54 | 12.4 | +6.0 | +2.24 |
| Sep. 30 | 1,130.75 | 6.5 | -5.9 | -2.28 |
| WTR YR 2005 | -- | -- | -0.3 | -0.01 |

RESERVOIRS IN WINOOSKI RIVER BASIN ABOVE MONTPELIER, VT

04285000 WRIGHTSVILLE DETENTION RESERVOIR AT WRIGHTSVILLE, VT

LOCATION.--Lat 44° 18'38", long 72° 34'31", Washington County, Hydrologic Unit 02010003, at Wrightsville Detention Reservoir Dam on North Branch Winooski River, 0.2 mi east of Wrightsville Dam Road and State Highway 12 intersection in Wrightsville, 0.3 mi downstream from Long Meadow Brook, 2.4 mi north of the State Capital Building in Montpelier, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--66.5 mi².

PERIOD OF RECORD.--Gage heights and contents: Monthend reading only, November 1935 to February 1936 (in WSP 1307), March to May 1936 in WSP 798), June 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 28, 1960, nonrecording gage at present site at datum 612.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers in 1935 for flood control; modification of intake-structure works to create a recreational pool completed in June 1965. Usable capacity for recreation, 22 million ft³ between elevations 612.75 ft (bottom of outlet opening) and 620.00 ft; for flood control, 851.5 million ft³ between elevations 620.00 ft and 685.00 ft (crest of spillway). Reservoir used for storage of water for power September 1985 to current year. Usable capacity for storage of water power 774 million ft³ between elevation 631.00 ft (sill of gate) and 685.00 ft (crest of spillway). Total usable capacity 873.5 million ft³. Figures given herein represent usable contents, determined from capacity tables furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 676.4 ft, present datum, March 22, 1936, from graph based on gage readings; minimum observed, 613.00 ft, August 17, 1949 and August 17-19, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 652.30 ft, April 4; minimum recorded, 633.03 ft, December 6, but may have been less during period of no record August 9 to September 30.

MONTHEND ELEVATION AND CONTENTS AT 2400
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| Date | Elevation (feet) | Contents (millions of cubic feet) | Change in Contents (millions of cubic feet) | Change in Contents (Equivalent cubic feet per second) |
|-------------|---------------------|---|--|---|
| Sep. 30 | 633.25 | 95.7 | -- | -- |
| Oct. 31 | 633.38 | 96.7 | +1.0 | +0.37 |
| Nov. 30 | 635.09 | 110.3 | +13.6 | +5.25 |
| Dec. 31 | 633.78 | 99.8 | -10.5 | -3.92 |
| CAL YR 2004 | -- | -- | -9.2 | -0.29 |
| Jan. 31 | 633.26 | 95.8 | -4.0 | -1.49 |
| Feb. 28 | 633.13 | 94.8 | -1.0 | -0.41 |
| Mar. 31 | 637.22 | 128.2 | +33.4 | +12.5 |
| Apr. 30 | 636.57 | 122.6 | -5.6 | -2.16 |
| May 31 | 634.87 | 108.5 | -14.1 | -5.26 |
| Jun. 30 | 634.16 | 102.8 | -5.7 | -2.20 |
| Jul. 31 | *634.13 | 102.6 | -0.2 | -0.07 |
| Aug. 31 | *638.71 | 141.3 | +38.7 | +14.4 |
| Sep. 30 | *633.79 | 99.9 | -41.4 | -16.0 |
| WTR YR 2005 | -- | -- | +4.2 | +0.13 |

* Elevations furnished by Washington Electric Coop

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT

LOCATION.--Lat 44° 17'58", long 72° 34'45", Washington County, Hydrologic Unit 02010003, on right bank, 0.8 mi south of Wrightsville Dam Road and State Highway 12 intersection in Wrightsville, 0.9 mi downstream from Wrightsville Detention Reservoir, 2.6 mi north of the Vermont State Capitol Building in Montpelier, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--69.2 mi².

PERIOD OF RECORD.--Discharge records: October 1933 to current year.

REVISED RECORDS.--WSP 1237: 1934-39.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 549.53 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to November 21, 1934, nonrecording gage at same site, datum then in use. Prior to April 24, 2001, at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Discharge affected since 1935 by Wrightsville Detention Reservoir (Reservoirs in Winooski River Basin above Montpelier). Flow regulated by power plant at Wrightsville Detention Reservoir since September 1985. Occasional diurnal fluctuation at low flow caused by small mill upstream; more frequent diurnal fluctuation prior to 1968. Maximum discharge since construction of Wrightsville Detention Reservoir in 1935, 1,100 ft³/s, July 5 and October 24, 1990.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 17,200 ft³/s, November 3, 1927, by computation of peak flow over dam 0.8 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 901 ft³/s, Apr. 3, 4, gage height, 4.09 ft; minimum daily discharge, 8.2 ft³/s Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|----------|------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | 19 | 26 | 282 | 93 | e58 | 42 | 710 | 451 | 175 | 29 | 29 | 699 |
| 2 | 18 | 28 | 675 | e121 | e117 | e29 | 759 | 323 | 119 | 29 | 28 | 391 |
| 3 | 18 | 93 | 345 | 128 | e65 | e32 | 853 | 251 | 88 | 29 | 28 | 156 |
| 4 | 18 | 108 | 222 | 129 | e78 | 17 | 898 | 218 | 71 | 26 | 27 | 59 |
| 5 | 17 | 70 | 195 | 129 | e64 | e14 | 884 | 182 | 59 | 22 | 21 | 52 |
| 6 | 16 | 158 | 178 | e130 | e45 | e42 | 862 | 151 | 36 | 24 | 16 | 28 |
| 7 | 15 | 115 | 32 | 102 | e72 | 44 | 833 | 133 | 51 | 24 | 13 | 28 |
| 8 | 15 | 149 | 115 | e87 | 46 | 65 | 858 | 122 | 29 | 23 | 11 | 28 |
| 9 | 15 | 85 | 133 | e80 | 71 | e48 | 878 | 115 | 32 | 116 | 9.1 | 54 |
| 10 | 15 | 56 | 133 | 72 | 33 | e27 | 851 | 107 | 57 | 425 | 8.4 | 73 |
| 11 | 15 | 57 | 131 | e72 | e107 | e32 | 821 | 106 | 45 | 221 | 8.4 | 24 |
| 12 | 14 | 50 | 191 | e65 | e78 | e68 | 780 | 40 | 38 | 95 | 8.3 | 19 |
| 13 | 14 | 41 | 165 | 56 | 65 | e45 | 695 | 57 | 34 | 37 | 8.4 | 16 |
| 14 | 14 | 38 | 113 | 154 | e72 | 41 | 327 | 75 | 86 | 53 | 8.3 | 14 |
| 15 | 14 | 37 | 121 | 312 | 56 | e35 | 250 | 75 | 465 | 29 | 8.7 | 17 |
| 16 | 45 | 41 | e78 | 210 | 55 | e39 | 237 | 113 | 343 | 29 | 9.0 | 36 |
| 17 | 67 | 36 | e95 | 163 | e74 | e77 | 253 | 101 | 588 | 41 | 8.7 | 42 |
| 18 | 51 | 33 | e60 | e112 | e77 | e98 | 287 | 87 | 722 | 36 | 8.4 | 67 |
| 19 | 31 | 39 | 73 | e103 | e68 | 96 | 257 | 73 | 571 | 29 | 8.2 | 46 |
| 20 | 29 | 38 | e64 | e87 | e60 | e42 | 267 | 69 | 255 | 29 | 8.7 | 35 |
| 21 | 26 | 49 | e55 | e127 | e87 | e45 | 410 | 61 | 178 | 28 | 109 | 28 |
| 22 | 26 | 67 | e65 | e112 | e70 | e38 | 257 | 90 | 116 | 26 | 100 | 29 |
| 23 | 26 | 70 | 59 | e87 | e52 | e62 | 391 | 132 | 89 | 22 | 28 | 24 |
| 24 | 26 | 60 | 699 | e107 | e65 | 65 | 724 | 157 | 71 | 19 | 28 | 20 |
| 25 | 25 | 212 | 465 | e72 | e65 | 60 | 715 | 114 | 64 | 16 | 28 | 17 |
| 26 | 22 | 480 | 219 | e80 | e63 | e82 | 433 | 89 | 36 | 13 | 25 | 18 |
| 27 | 21 | 241 | e168 | e87 | e57 | e77 | 288 | 93 | 48 | 18 | 18 | 138 |
| 28 | 19 | 173 | e125 | e72 | e50 | 107 | 712 | 89 | 40 | 116 | 14 | 122 |
| 29 | 19 | 392 | e114 | e68 | --- | 186 | 721 | 89 | 27 | 41 | 14 | 75 |
| 30 | 19 | 263 | e122 | e91 | --- | 252 | 440 | 82 | 29 | 28 | 14 | 114 |
| 31 | 20 | --- | e107 | e89 | --- | 363 | --- | 134 | --- | 28 | 293 | --- |
| TOTAL | 709 | 3,305 | 5,599 | 3,397 | 1,870 | 2,270 | 17,651 | 3,979 | 4,562 | 1,701 | 946.6 | 2,469 |
| MEAN | 22.9 | 110 | 181 | 110 | 66.8 | 73.2 | 588 | 128 | 152 | 54.9 | 30.5 | 82.3 |
| MAX | 67 | 480 | 699 | 312 | 117 | 363 | 898 | 451 | 722 | 425 | 293 | 699 |
| MIN | 14 | 26 | 32 | 56 | 33 | 14 | 237 | 40 | 27 | 13 | 8.2 | 14 |
| MEAN (†) | 23.2 | 1115 | 177 | 108 | 66.4 | 85.7 | 586 | 123 | 150 | 54.8 | 45.0 | 66.3 |
| CFSM (†) | 0.34 | 1.66 | 2.56 | 1.56 | 0.96 | 1.24 | 8.47 | 1.78 | 2.17 | 0.79 | 0.65 | 0.96 |
| IN. (†) | 0.39 | 1.86 | 2.94 | 1.80 | 1.00 | 1.43 | 9.45 | 2.05 | 2.42 | 0.91 | 0.75 | 1.07 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 106 | 140 | 115 | 84.4 | 69.6 | 175 | 454 | 241 | 92.1 | 49.9 | 49.7 | 53.0 |
| MAX | 437 | 358 | 318 | 279 | 348 | 556 | 714 | 617 | 396 | 271 | 278 | 230 |
| (WY) | (1991) | (2004) | (1974) | (1998) | (1981) | (1936) | (1994) | (1972) | (1984) | (1973) | (1995) | (1938) |
| MIN | 6.00 | 25.9 | 28.0 | 17.5 | 14.6 | 21.4 | 121 | 47.3 | 15.8 | 7.91 | 7.95 | 5.10 |
| (WY) | (1964) | (1954) | (1948) | (1940) | (1980) | (1940) | (1995) | (1941) | (1949) | (1953) | (2001) | (1963) |

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1934 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 48,603 | | 48,458.6 | | 136 | |
| ANNUAL MEAN | 133 | | 133 | | 71.4 | |
| HIGHEST ANNUAL MEAN | | | | | 226 | 1973 |
| LOWEST ANNUAL MEAN | | | | | 71.4 | 1965 |
| HIGHEST DAILY MEAN | 792 | Mar 28 | 898 | Apr 4 | 1,620 | Apr 17, 1934 |
| LOWEST DAILY MEAN | 12 | Aug 11 | 8.2 | Aug 19 | 0.20 | Aug 13, 1941 |
| ANNUAL SEVEN-DAY MINIMUM | 14 | Oct 9 | 8.5 | Aug 10 | 2.8 | Aug 14, 1970 |
| MAXIMUM PEAK FLOW | | | 901 | Apr 3 | a 2,170 | Apr 12, 1934 |
| MAXIMUM PEAK STAGE | | | 4.09 | Apr 3 | b 6.53 | Apr 12, 1934 |
| 10 PERCENT EXCEEDS | 330 | | 344 | | 396 | |
| 50 PERCENT EXCEEDS | 66 | | 65 | | 62 | |
| 90 PERCENT EXCEEDS | 24 | | 17 | | 14 | |

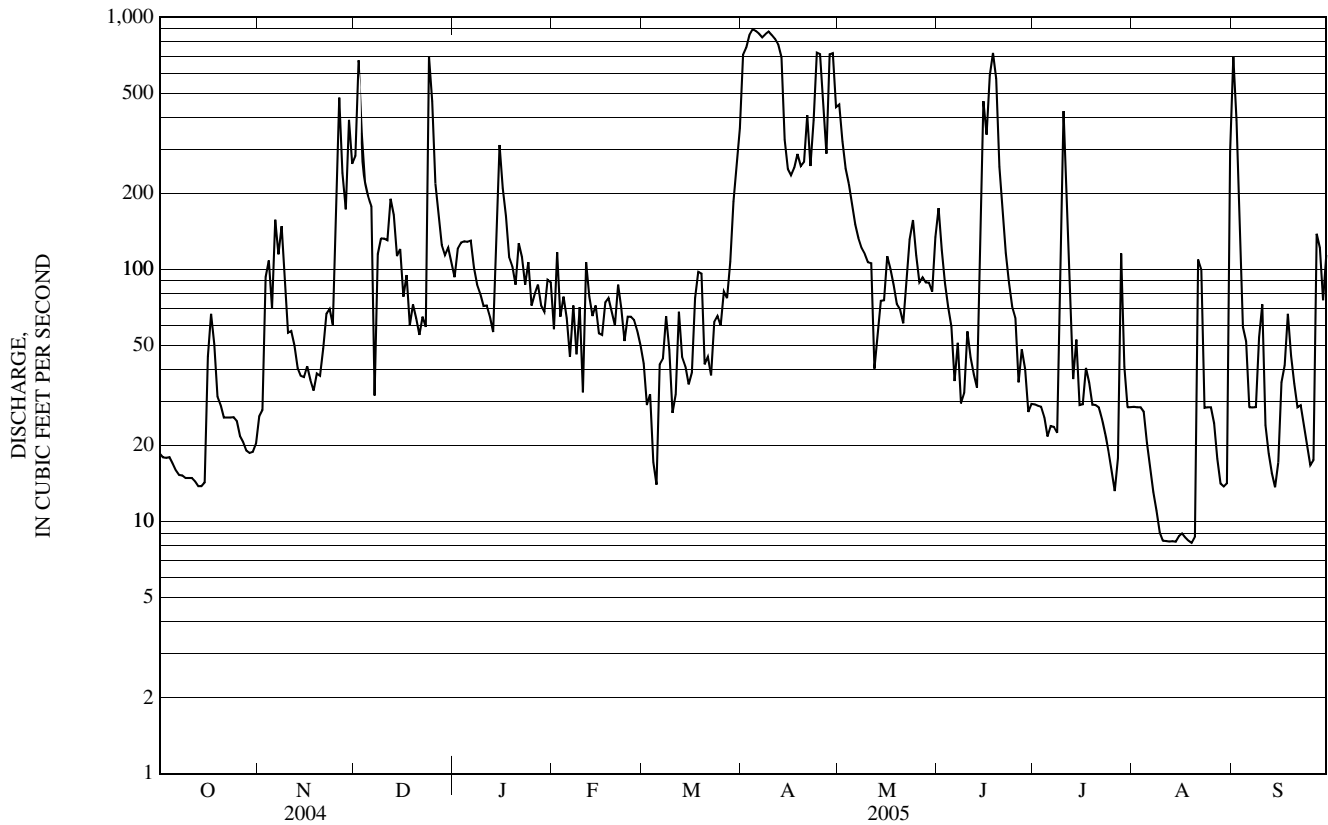
a From rating curve extended above 1,030 ft³/s.

b At datum then in use.

c Estimated.

(†) Adjusted for change in contents in Wrightsville Detention Reservoir.

NOTE: All statistics are based on unadjusted daily and monthly mean data.



04286000 WINOOSKI RIVER AT MONTPELIER, VT

LOCATION.--Lat 44° 15'24", long 72° 35'38"(revised), Washington County, Hydrologic Unit 02010003, on right bank, 0.4 mi upstream from Dog River, 0.6 mi downstream of Bailey Road bridge, 0.8 mi southwest of the Vermont State Capitol Building in Montpelier, and 1.0 mi downstream of the North Branch Winooski River.

DRAINAGE AREA.--397 mi².

PERIOD OF RECORD.--Discharge records: May 1909 to June 1914 (fragmentary), July 1914 to September 1923, August 1928 to current year.

REVISED RECORDS.--WSP 424: 1915. WSP 894: Drainage area. WSP 1437: 1912-14(M), 1915-18, 1919(M), 1920, 1921(M), 1922-23, 1929, 1933, 1934(M), 1936, 1937(M), 1938, 1946(M), WDR MA-NH-RI-VT-72-1: 1969(M), 1970(P), 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 499.99 ft above National Geodetic Vertical Datum of 1929. Prior to June 16, 1914, nonrecording gage at site 0.9 mi upstream at different datum. June 16 to July 3, 1914, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by several small power plants upstream, by Peacham Pond and, since 1926, by Mollys Falls Reservoir, combined usable capacity, 492 million ft³, which regulated runoff from 24 mi², and by East Barre and Wrightsville Detention Reservoirs since 1935 (Reservoirs in Winooski River Basin above Montpelier, VT).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 57,000 ft³/s, November 3, 1927, gage height, 27.1 ft, from rating curve extended above 9,090 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,110 ft³/s, Apr. 3, gage height, 11.64 ft; minimum daily discharge, 101 ft³/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|--------|--------|-------|--------|--------|--------|--------|--------|-------|--------|
| 1 | 152 | 155 | 1,120 | e645 | e255 | e250 | 3,070 | 2,230 | 794 | 295 | 186 | 2,370 |
| 2 | 143 | 161 | 2,030 | e590 | e240 | e225 | 3,450 | 1,750 | 556 | 275 | 282 | 1,040 |
| 3 | 151 | 307 | 1,080 | e685 | e230 | e210 | 6,220 | 1,410 | 454 | 240 | 199 | 655 |
| 4 | 148 | 379 | 776 | e660 | e250 | e235 | 4,760 | 1,200 | 399 | 222 | 174 | 468 |
| 5 | 134 | 336 | 634 | e540 | e245 | e220 | 3,530 | 1,070 | 347 | 204 | 166 | 318 |
| 6 | 136 | 489 | 461 | e455 | e245 | e210 | 3,400 | 896 | 312 | 268 | 218 | 220 |
| 7 | 133 | 405 | 447 | e465 | e255 | e205 | 3,440 | 879 | 339 | 326 | 145 | 190 |
| 8 | 128 | 405 | 527 | e430 | e275 | e240 | 3,540 | 920 | 366 | 238 | 135 | 177 |
| 9 | 138 | 370 | 610 | e415 | e295 | e260 | 3,120 | 760 | 352 | 1,320 | 131 | 200 |
| 10 | 137 | 223 | 560 | e415 | e315 | e275 | 2,770 | 728 | 835 | 2,010 | 126 | 210 |
| 11 | 138 | 252 | 763 | e385 | e295 | e255 | 2,480 | 709 | 481 | 904 | 113 | 155 |
| 12 | 133 | 230 | 839 | e360 | e280 | e230 | 2,140 | 614 | 367 | 566 | 113 | 151 |
| 13 | 128 | 273 | 687 | e405 | e260 | e218 | 1,910 | 573 | 335 | 352 | 115 | 161 |
| 14 | 122 | 162 | e560 | e1,350 | e275 | e212 | 1,460 | 555 | 613 | 348 | 121 | 146 |
| 15 | 120 | 178 | e450 | e900 | e290 | e210 | 1,290 | 536 | 1,910 | 327 | 149 | 176 |
| 16 | 269 | 243 | e485 | e620 | e330 | e215 | 1,210 | 779 | 1,480 | 264 | 136 | 247 |
| 17 | 322 | 215 | e440 | e470 | e360 | e215 | 1,160 | 746 | 2,390 | 245 | 127 | 283 |
| 18 | 236 | 221 | e425 | e410 | e305 | e218 | 1,200 | 629 | 2,890 | 231 | 125 | 339 |
| 19 | 195 | 247 | e440 | e385 | e285 | e221 | 1,170 | 542 | 2,210 | 215 | 102 | 281 |
| 20 | 169 | 231 | e335 | e370 | e280 | e222 | 1,200 | 525 | 1,280 | 266 | 101 | 282 |
| 21 | 242 | 247 | e345 | e355 | e320 | e225 | 1,920 | 495 | 927 | 193 | 462 | 198 |
| 22 | 162 | 307 | e500 | e345 | e275 | e240 | 1,240 | 638 | 784 | 184 | 461 | 178 |
| 23 | 151 | 341 | e700 | e325 | e241 | e270 | 1,960 | 887 | 651 | 316 | 280 | 163 |
| 24 | 148 | 285 | e1,850 | e315 | e260 | e310 | 3,520 | 941 | 578 | 201 | 266 | 154 |
| 25 | 160 | 788 | e1,010 | e310 | e250 | e325 | 2,970 | 645 | 500 | 172 | 226 | 138 |
| 26 | 195 | 1,170 | e765 | e300 | e235 | e330 | 2,110 | 607 | 382 | 160 | 230 | 152 |
| 27 | 138 | 655 | e710 | e295 | e230 | e390 | 1,590 | 639 | 395 | 237 | 150 | 408 |
| 28 | 121 | 602 | e630 | e285 | e230 | e520 | 2,950 | 575 | 404 | 597 | 139 | 400 |
| 29 | 127 | 1,130 | e570 | e275 | --- | e795 | 2,740 | 532 | 333 | 349 | 188 | 281 |
| 30 | 160 | 774 | e510 | e270 | --- | e1,010 | 2,030 | 647 | 331 | 212 | 192 | 342 |
| 31 | 143 | --- | e550 | e260 | --- | e1,400 | --- | 910 | --- | 187 | 959 | --- |
| TOTAL | 4,979 | 11,781 | 21,809 | 14,290 | 7,606 | 10,361 | 75,550 | 25,567 | 23,995 | 11,924 | 6,517 | 10,483 |
| MEAN | 161 | 393 | 704 | 461 | 272 | 334 | 2,518 | 825 | 800 | 385 | 210 | 349 |
| MAX | 322 | 1,170 | 2,030 | 1,350 | 360 | 1,400 | 6,220 | 2,230 | 2,890 | 2,010 | 959 | 2,370 |
| MIN | 120 | 155 | 335 | 260 | 230 | 205 | 1,160 | 495 | 312 | 160 | 101 | 138 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2005, BY WATER YEAR (WY)

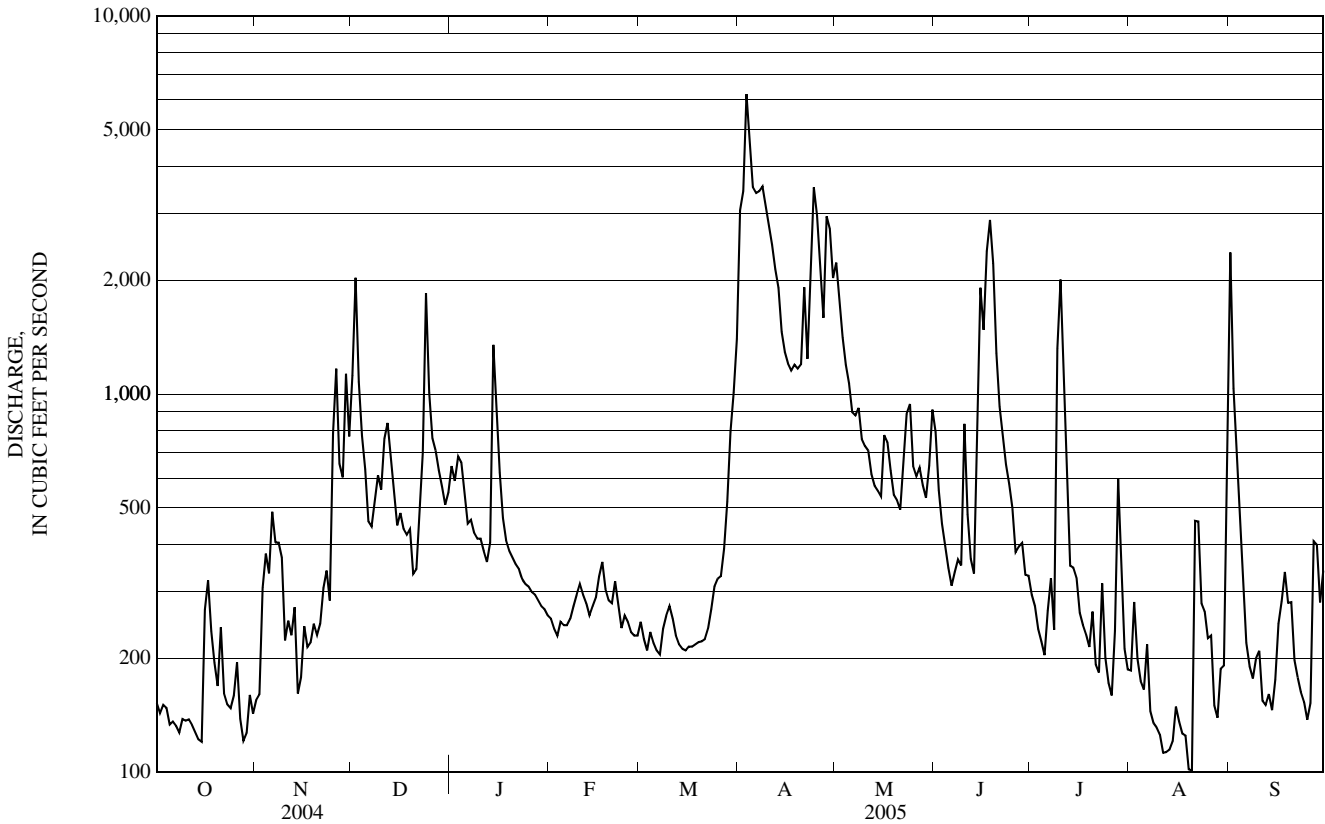
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 385 | 524 | 504 | 427 | 384 | 894 | 1,867 | 948 | 483 | 275 | 244 | 237 |
| MAX | 1,432 | 1,507 | 1,504 | 1,226 | 1,475 | 3,442 | 3,275 | 2,374 | 1,785 | 1,245 | 1,008 | 934 |
| (WY) | (1946) | (2004) | (1984) | (1935) | (1981) | (1936) | (1933) | (1972) | (1947) | (1973) | (1990) | (1938) |
| MIN | 74.3 | 152 | 126 | 109 | 91.6 | 153 | 555 | 254 | 131 | 88.5 | 50.5 | 60.1 |
| (WY) | (1964) | (1979) | (1915) | (1940) | (1940) | (1940) | (1995) | (1921) | (1995) | (1991) | (2001) | (1921) |

ST.LAWRENCE RIVER BASIN

04286000 WINOOSKI RIVER AT MONTPELIER, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1914 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 207,763 | | 224,862 | | 598 | |
| ANNUAL MEAN | 568 | | 616 | | 270 | |
| HIGHEST ANNUAL MEAN | | | | | 967 | 1976 |
| LOWEST ANNUAL MEAN | | | | | 270 | 1965 |
| HIGHEST DAILY MEAN | 3,000 | Apr 2 | 6,220 | Apr 3 | 12,200 | Mar 18, 1936 |
| LOWEST DAILY MEAN | 114 | Aug 10 | 101 | Aug 20 | 17 | Sep 3, 1933 |
| ANNUAL SEVEN-DAY MINIMUM | 131 | Oct 9 | 122 | Aug 8 | 41 | Aug 22, 2001 |
| MAXIMUM PEAK FLOW | | | 7,110 | Apr 3 | 17,200 | Apr 7, 1912 |
| MAXIMUM PEAK STAGE | | | 11.64 | Apr 3 | 17.55 | Jun 30, 1973 |
| 10 PERCENT EXCEEDS | 1,190 | | 1,370 | | 1,430 | |
| 50 PERCENT EXCEEDS | 378 | | 330 | | 330 | |
| 90 PERCENT EXCEEDS | 166 | | 151 | | 119 | |

e Estimated



04287000 DOG RIVER AT NORTHFIELD FALLS, VT

LOCATION.--Lat 44° 10'58", long 72° 38'27", Washington County, Hydrologic Unit 02010003, on right bank, just downstream of New England Central Railroad bridge, 0.9 mi northeast of Cox Brook Road and State Highway 12 intersection in Northfield Falls, 1.1 mi downstream from Cox Branch, and 4.2 mi downstream of Station 04286500, Dog River at Northfield.

DRAINAGE AREA.--76.1 mi².

PERIOD OF RECORD.--Discharge records: October 1934 to current year. October and November 1934 monthly discharge only, published in WSP 1307.

REVISED RECORDS.--WSP 1237: 1935-37.

GAGE.--Water-stage recorder. Datum of gage is 603.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Infrequent diurnal fluctuation at low flow by power plant upstream; regulation much greater prior to 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|--------------------------------|------------------|-------|------|--------------------------------|------------------|
| Apr 2 | 1745 | 1,750 | 4.75 | Apr 3 | 1015 | *3,110 | *6.30 |

Minimum discharge, 11 ft³/s, Aug. 30, 31, gage height, 0.67 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | 51 | 32 | 366 | 176 | e63 | e55 | 754 | 461 | 146 | 68 | 37 | 324 |
| 2 | 49 | 32 | 449 | 149 | e58 | e54 | 1,030 | 341 | 114 | 71 | 47 | 96 |
| 3 | 48 | 50 | 247 | 176 | e54 | e50 | 2,200 | 287 | 102 | 56 | 38 | 60 |
| 4 | 45 | 45 | e185 | 170 | 58 | e53 | 1,130 | 244 | 94 | 49 | 31 | 46 |
| 5 | 44 | 63 | e157 | 140 | 57 | e55 | 715 | 214 | 84 | 45 | 40 | 39 |
| 6 | 42 | 61 | e120 | e112 | 57 | 50 | 750 | 191 | 82 | 56 | 42 | 34 |
| 7 | 41 | 54 | 133 | e110 | 58 | 49 | 875 | 175 | 92 | 56 | 29 | 30 |
| 8 | 39 | 49 | 158 | e107 | 62 | e59 | 924 | 164 | 75 | 49 | 26 | 27 |
| 9 | 38 | 45 | 150 | e107 | 72 | e62 | 675 | 149 | 71 | 322 | 24 | 28 |
| 10 | 37 | 41 | 136 | 105 | 76 | e65 | 587 | 135 | 82 | 373 | 22 | 24 |
| 11 | 37 | 43 | 198 | 97 | 71 | e61 | 504 | 124 | 75 | 143 | 21 | 23 |
| 12 | 36 | 42 | 193 | 91 | 68 | e55 | 386 | 114 | 73 | 99 | 20 | 22 |
| 13 | 35 | 38 | 163 | 93 | 62 | e53 | 326 | 105 | 68 | 81 | 21 | 20 |
| 14 | 33 | 35 | e138 | e325 | 64 | e51 | 299 | 101 | 115 | 75 | 21 | 19 |
| 15 | 35 | 40 | e115 | e210 | 69 | e51 | 276 | 111 | 205 | 70 | 34 | 30 |
| 16 | 75 | 41 | e119 | e168 | 75 | e52 | 262 | 138 | 307 | 61 | 23 | 34 |
| 17 | 60 | 41 | e120 | e120 | 86 | e52 | 272 | 114 | 818 | 75 | 18 | 35 |
| 18 | 48 | 41 | e115 | e107 | e71 | e53 | 272 | 102 | 475 | 62 | 16 | 33 |
| 19 | 43 | 40 | e110 | e102 | e69 | e53 | 241 | 96 | 257 | 54 | 15 | 27 |
| 20 | 40 | 37 | e85 | e96 | e67 | e55 | 246 | 90 | 185 | 47 | 16 | 25 |
| 21 | 38 | 58 | e94 | e91 | e69 | e59 | 356 | 85 | 146 | 40 | 57 | 23 |
| 22 | 37 | 60 | e102 | e89 | e67 | 70 | 230 | 125 | 149 | 44 | 34 | 21 |
| 23 | 36 | 52 | e244 | e83 | e60 | 76 | 517 | 146 | 120 | 61 | 26 | 20 |
| 24 | 35 | 50 | e764 | e80 | e59 | 74 | 939 | 194 | 104 | 44 | 22 | 18 |
| 25 | 35 | 236 | e345 | e80 | e57 | 81 | 595 | 146 | 90 | 38 | 20 | 18 |
| 26 | 34 | 215 | e266 | e78 | e56 | 80 | 407 | 131 | 80 | 35 | 18 | 21 |
| 27 | 33 | 122 | e183 | e77 | e54 | 93 | 423 | 134 | 72 | 61 | 16 | 46 |
| 28 | 32 | 144 | e170 | e74 | e53 | 150 | 741 | 118 | 67 | 85 | 16 | 29 |
| 29 | 32 | 239 | e148 | e70 | --- | 226 | 463 | 111 | 76 | 50 | 17 | 29 |
| 30 | 31 | 156 | e127 | e70 | --- | 276 | 378 | 104 | 87 | 39 | 18 | 39 |
| 31 | 32 | --- | e121 | e66 | --- | 428 | --- | 163 | --- | 34 | 262 | --- |
| TOTAL | 1,251 | 2,202 | 6,021 | 3,619 | 1,792 | 2,701 | 17,773 | 4,913 | 4,511 | 2,443 | 1,047 | 1,240 |
| MEAN | 40.4 | 73.4 | 194 | 117 | 64.0 | 87.1 | 592 | 158 | 150 | 78.8 | 33.8 | 41.3 |
| MAX | 75 | 239 | 764 | 325 | 86 | 428 | 2,200 | 461 | 818 | 373 | 262 | 324 |
| MIN | 31 | 32 | 85 | 66 | 53 | 49 | 230 | 85 | 67 | 34 | 15 | 18 |
| CFSM | 0.53 | 0.96 | 2.55 | 1.53 | 0.84 | 1.14 | 7.78 | 2.08 | 1.98 | 1.04 | 0.44 | 0.54 |
| IN. | 0.61 | 1.08 | 2.94 | 1.77 | 0.88 | 1.32 | 8.69 | 2.40 | 2.21 | 1.19 | 0.51 | 0.61 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2005, BY WATER YEAR (WY)

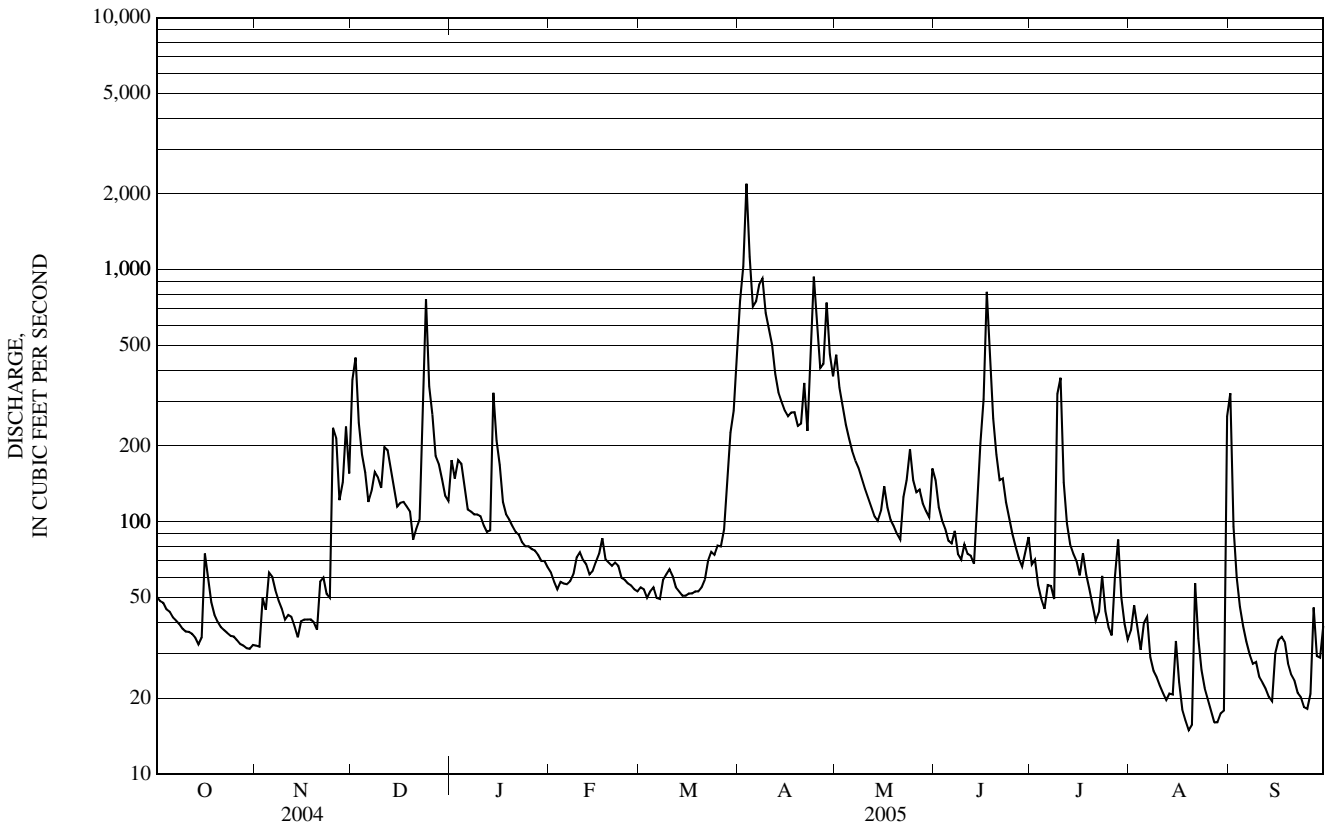
| | 73.1 | 108 | 115 | 90.8 | 86.0 | 208 | 422 | 192 | 82.6 | 43.3 | 39.7 | 40.0 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 73.1 | 108 | 115 | 90.8 | 86.0 | 208 | 422 | 192 | 82.6 | 43.3 | 39.7 | 40.0 |
| MAX | 301 | 319 | 349 | 264 | 439 | 831 | 785 | 463 | 357 | 176 | 219 | 259 |
| (WY) | (1978) | (2004) | (1984) | (1996) | (1981) | (1936) | (1969) | (1972) | (1947) | (1973) | (1976) | (1938) |
| MIN | 8.19 | 14.8 | 24.7 | 21.5 | 18.6 | 37.0 | 115 | 57.5 | 19.7 | 8.96 | 8.48 | 9.19 |
| (WY) | (1964) | (2002) | (2002) | (1940) | (1940) | (1940) | (1995) | (1941) | (1965) | (1965) | (2001) | (1963) |

ST. LAWRENCE RIVER BASIN

04287000 DOG RIVER AT NORTHFIELD FALLS, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1935 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 44,925 | | 49,513 | | 125 | |
| ANNUAL MEAN | 123 | | 136 | | 205 | |
| HIGHEST ANNUAL MEAN | | | | | 1976 | |
| LOWEST ANNUAL MEAN | | | | | 51.6 | |
| HIGHEST DAILY MEAN | 898 | Mar 27 | 2,200 | Apr 3 | 4,390 | Mar 18, 1936 |
| LOWEST DAILY MEAN | 24 | Jul 14 | 15 | Aug 19 | 4.3 | Sep 7, 1942 |
| ANNUAL SEVEN-DAY MINIMUM | 26 | Jul 12 | 18 | Aug 24 | 5.3 | Sep 14, 2001 |
| MAXIMUM PEAK FLOW | | | a 3,110 | Apr 3 | a 10,600 | Jun 30, 1973 |
| MAXIMUM PEAK STAGE | | | 6.30 | Apr 3 | 11.57 | Jun 30, 1973 |
| INSTANTANEOUS LOW FLOW | | | b 11 | Aug 30 | 4.3 | Aug 31, 1942 |
| ANNUAL RUNOFF (CF5M) | 1.61 | | 1.78 | | 1.64 | |
| ANNUAL RUNOFF (INCHES) | 21.96 | | 24.20 | | 22.32 | |
| 10 PERCENT EXCEEDS | 256 | | 302 | | 275 | |
| 50 PERCENT EXCEEDS | 80 | | 70 | | 64 | |
| 90 PERCENT EXCEEDS | 35 | | 29 | | 17 | |

a From rating curve extended above 1,500 ft³/s on basis of flow over dam at gage height 8.49 ft.
 b Also occurred on Aug. 31.
 c Estimated



04288000 MAD RIVER NEAR MORETOWN, VT

LOCATION.--Lat 44° 16'38", long 72° 44'35", Washington County, Hydrologic Unit 02010003, on left bank, at downstream side of Munns Road bridge, 0.4 mi downstream of Welder Brook, 2.0 mi northeast of Moretown Mountain Road and State Highway 100B intersection in Moretown, 3.2 mi west of State Highway 100B bridge across Winooski River in Middlesex, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--Discharge records: October 1928 to current year.

REVISED RECORDS.--WSP 744: Drainage area. WSP 854: 1934(M). WSP 1114: 1929, 1930(M), 1936-37.

GAGE.--Water-stage recorder. Concrete control since October 13, 1933. Datum of gage is 543.93 ft above National Geodetic Vertical Datum of 1929 (levels by Vermont Department of Highway). July 6 to November 4, 1910, nonrecording gage at same site at different datum. November 20, 1928 to September 27, 1930, nonrecording gage at same site at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional diurnal fluctuation at low flow; much greater regulation prior to 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 23,000 ft³/s, November 3, 1927, gage height, 19.4 ft, from floodmarks, by computation of peak flow over dam at gage heights 9.98 ft, 11.51 ft, 16.34 ft, 19.4 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Dec 24 | 0115 | ice jam | *7.68 | Aug 31 | 2300 | *3,340 | 6.76 |

Minimum discharge, 30 ft³/s, Aug. 18, 19, 20, gage height, 2.56 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 67 | 52 | 880 | e420 | e85 | e64 | 1,320 | e761 | 205 | 95 | 65 | 874 |
| 2 | 63 | 52 | 891 | e377 | e81 | e62 | 1,420 | e577 | 178 | 89 | 314 | 251 |
| 3 | 64 | 152 | 454 | e390 | e76 | e61 | 2,670 | e497 | 158 | 75 | 131 | 153 |
| 4 | 59 | 107 | 334 | e350 | e75 | e59 | e1,730 | e424 | 139 | 67 | 91 | 119 |
| 5 | 58 | 145 | e262 | e310 | e74 | e63 | 1,150 | e384 | 123 | 64 | 109 | 105 |
| 6 | 56 | 141 | e240 | e215 | e74 | e59 | 1,020 | e343 | 111 | 122 | 108 | 91 |
| 7 | 55 | 130 | e258 | e220 | e76 | e57 | 1,230 | e320 | 166 | 91 | 71 | 72 |
| 8 | 53 | 107 | e277 | e233 | e82 | e64 | 1,470 | e299 | 109 | 75 | 60 | 64 |
| 9 | 51 | 94 | e245 | e225 | e93 | e80 | 1,050 | e277 | 100 | 913 | 53 | 68 |
| 10 | 48 | 83 | e220 | e193 | e100 | e83 | 870 | e256 | 129 | 921 | 47 | 60 |
| 11 | 48 | 86 | e300 | e180 | e92 | e77 | 802 | e231 | 107 | 300 | 43 | 52 |
| 12 | 48 | 88 | e330 | e167 | e88 | e70 | 645 | 215 | 101 | 187 | 39 | 47 |
| 13 | 48 | 74 | e257 | e171 | e83 | e68 | 573 | 190 | 110 | 145 | 43 | 43 |
| 14 | 46 | 77 | e235 | e650 | e84 | e65 | e509 | 180 | 235 | 157 | 41 | 40 |
| 15 | 64 | 85 | e216 | e380 | e92 | e64 | e480 | 202 | 378 | 146 | 71 | 85 |
| 16 | 139 | 72 | e212 | e215 | e102 | e66 | e464 | 261 | 551 | 229 | 48 | 84 |
| 17 | 118 | 70 | e206 | e154 | e113 | e64 | e480 | 218 | 1,730 | 259 | 37 | 114 |
| 18 | 88 | 71 | e188 | e140 | e96 | e67 | e469 | 188 | 1,150 | 151 | 33 | 157 |
| 19 | 73 | 72 | e172 | e132 | e87 | e68 | e438 | 175 | 559 | 121 | 30 | 108 |
| 20 | 67 | 70 | e156 | e123 | e84 | e70 | e443 | 164 | 365 | 96 | 31 | 80 |
| 21 | 64 | 125 | e177 | e118 | e86 | e75 | e614 | 154 | 275 | 81 | 230 | 70 |
| 22 | 60 | 144 | e258 | e112 | e83 | e81 | e413 | 254 | 291 | 81 | 91 | 55 |
| 23 | 58 | 115 | e560 | e106 | e79 | e93 | e987 | 311 | 223 | 146 | 68 | 51 |
| 24 | 56 | 102 | e1,300 | e103 | e76 | e92 | e1,680 | 442 | 179 | 84 | 54 | 50 |
| 25 | 55 | 558 | e605 | e102 | e73 | e96 | e958 | 321 | 147 | 71 | 47 | 44 |
| 26 | 54 | 472 | e540 | e97 | e71 | e103 | e665 | 269 | 124 | 65 | 40 | 71 |
| 27 | 53 | 260 | e475 | e99 | e69 | e118 | e692 | 278 | 107 | 170 | 35 | 309 |
| 28 | 51 | 299 | e385 | e94 | e66 | e167 | e1,130 | 244 | 97 | 197 | 34 | 141 |
| 29 | 50 | 503 | e395 | e88 | --- | e250 | e755 | 224 | 131 | 102 | 39 | 121 |
| 30 | 50 | 300 | e415 | e87 | --- | e760 | e625 | 199 | 128 | 77 | 37 | 156 |
| 31 | 51 | --- | e375 | e86 | --- | e1,020 | --- | 220 | --- | 65 | 828 | --- |
| TOTAL | 1,915 | 4,706 | 11,818 | 6,337 | 2,340 | 4,186 | 27,752 | 9,078 | 8,406 | 5,442 | 2,968 | 3,735 |
| MEAN | 61.8 | 157 | 381 | 204 | 83.6 | 135 | 925 | 293 | 280 | 176 | 95.7 | 124 |
| MAX | 139 | 558 | 1,300 | 650 | 113 | 1,020 | 2,670 | 761 | 1,730 | 921 | 828 | 874 |
| MIN | 46 | 52 | 156 | 86 | 66 | 57 | 413 | 154 | 97 | 64 | 30 | 40 |
| CFSM | 0.44 | 1.13 | 2.74 | 1.47 | 0.60 | 0.97 | 6.66 | 2.11 | 2.02 | 1.26 | 0.69 | 0.90 |
| IN. | 0.51 | 1.26 | 3.16 | 1.70 | 0.63 | 1.12 | 7.43 | 2.43 | 2.25 | 1.46 | 0.79 | 1.00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

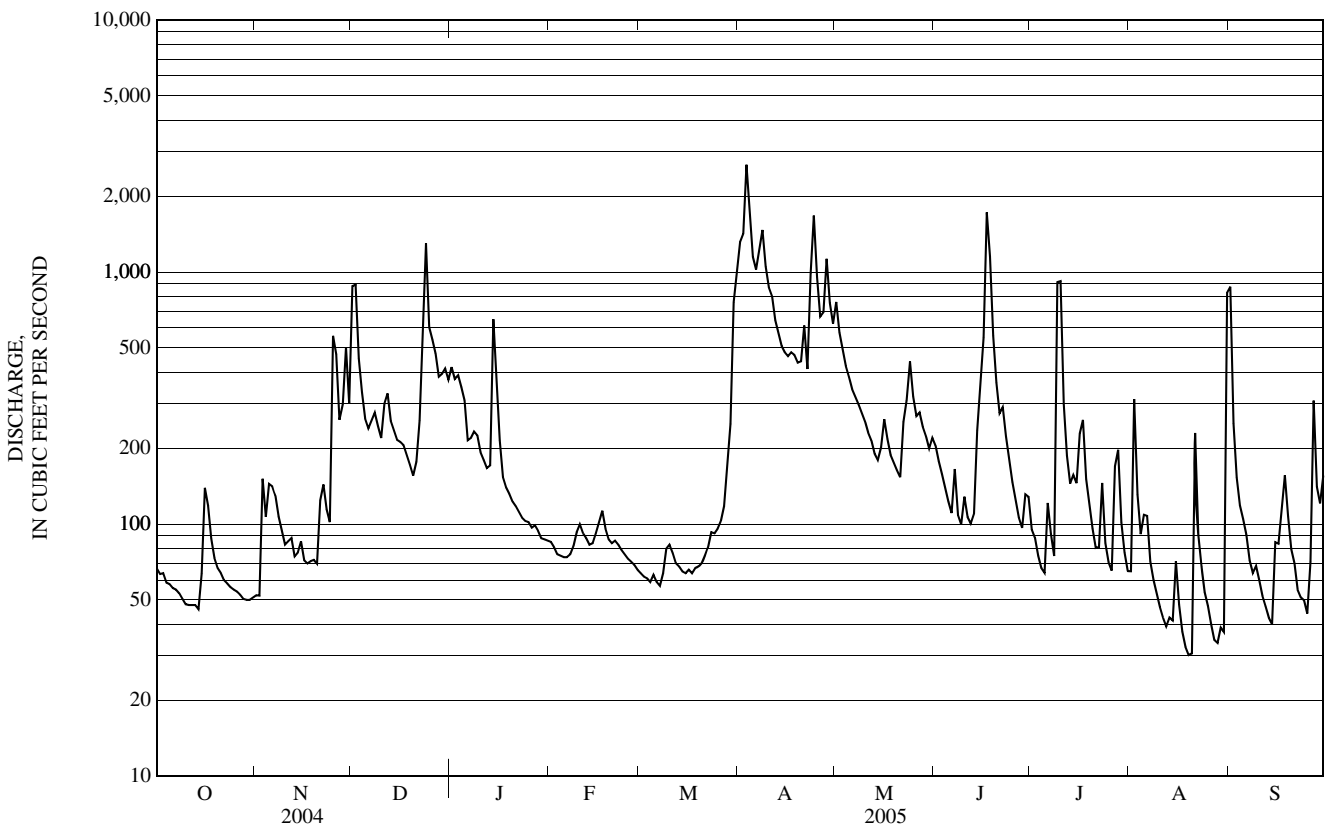
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 180 | 261 | 239 | 192 | 173 | 384 | 795 | 431 | 184 | 104 | 102 | 105 |
| MAX | 675 | 582 | 705 | 608 | 956 | 1,324 | 1,415 | 1,114 | 840 | 367 | 734 | 588 |
| (WY) | (1978) | (1984) | (1974) | (1998) | (1981) | (1936) | (1969) | (1940) | (1947) | (1998) | (1976) | (1938) |
| MIN | 22.1 | 65.5 | 73.0 | 35.9 | 40.8 | 76.9 | 258 | 142 | 46.2 | 22.8 | 20.6 | 22.5 |
| (WY) | (1964) | (1954) | (1948) | (1981) | (1931) | (1956) | (1995) | (1941) | (1965) | (1933) | (2001) | (1963) |

ST. LAWRENCE RIVER BASIN

04288000 MAD RIVER NEAR MORETOWN, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1929 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 91,522 | | 88,683 | | | |
| ANNUAL MEAN | 250 | | 243 | | 262 | |
| HIGHEST ANNUAL MEAN | | | | | 430 1976 | |
| LOWEST ANNUAL MEAN | | | | | 133 1965 | |
| HIGHEST DAILY MEAN | 2,140 | Mar 27 | 2,670 | Apr 3 | 6,410 | Jun 3, 1947 |
| LOWEST DAILY MEAN | 44 | Jul 4 | 30 | Aug 19 | 2.9 | Aug 18, 1929 |
| ANNUAL SEVEN-DAY MINIMUM | 49 | Oct 8 | 41 | Aug 24 | 4.6 | Aug 17, 1929 |
| MAXIMUM PEAK FLOW | | | 3,340 | Aug 31 | a 18,400 | Sep 22, 1938 |
| MAXIMUM PEAK STAGE | | | b 7.68 | Dec 24 | 16.34 | Sep 22, 1938 |
| INSTANTANEOUS LOW FLOW | | | c 30 | Aug 18 | 1.4 | Oct 1, 1930 |
| ANNUAL RUNOFF (CFSM) | 1.80 | | 1.75 | | 1.89 | |
| ANNUAL RUNOFF (INCHES) | 24.49 | | 23.73 | | 25.64 | |
| 10 PERCENT EXCEEDS | 550 | | 575 | | 588 | |
| 50 PERCENT EXCEEDS | 160 | | 115 | | 137 | |
| 90 PERCENT EXCEEDS | 62 | | 53 | | 39 | |

- a From rating curve extended above 6,300 ft³/s on basis of computation of flow over dam at gage-heights 9.98 ft., 11.51 ft., 16.34 ft., and 19.4 ft.
- b Ice jam.
- c Also occurred on Aug. 19, 20.
- e Estimated



04288225 WEST BRANCH LITTLE RIVER ABOVE BINGHAM FALLS NEAR STOWE, VT

LOCATION (revised).--Lat 44° 31'24", long 72° 46'20", Lamoille County, Hydrologic Unit 02010003, on left bank, 0.4 mi upstream from Bingham Falls, 0.7 mi southeast of Spruce Peak Road and Mountain Road (VT 108) intersection, 1.0 mi southeast of Barnes Camp, 1.6 mi northwest of Mountain Road (VT 108) crossing of West Branch Little River at Stowe Fork, and 5.8 mi northwest of Main Street (VT 100) and Mountain Road (VT 108) intersection in Stowe. Prior to Nov. 17, 2004, at site 1,000 ft upstream.

DRAINAGE AREA.--4.67 mi² (revised).

PERIOD OF RECORD.--Discharge records: October 2000 to current year. Peak Streamflow: Water years 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 17, 2004, at site 1,000 ft upstream at datum 75 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Winter records at times affected by water withdrawals for snow making.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Dec 23 | 2045 | 232 | 3.08 | Jul 9 | 2030 | 210 | 3.00 |
| Apr 3 | 0915 | 207 | 2.99 | Aug 31 | 0905 | *243 | *3.12 |
| Apr 27 | 2010 | 240 | 3.11 | | | | |

Minimum discharge, 1.3 ft³/s, Dec. 20, gage height, 0.95 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|
| 1 | 5.6 | 8.0 | 41 | 16 | 3.0 | 2.6 | 44 | 61 | 13 | 4.1 | 3.6 | 21 |
| 2 | 5.8 | 19 | 27 | 7.9 | 2.2 | 2.5 | 47 | 39 | 11 | 4.2 | 3.5 | 5.0 |
| 3 | 5.9 | e30 | 15 | 14 | e2.3 | 2.6 | 131 | 30 | 10 | 3.7 | 3.7 | 5.1 |
| 4 | 5.7 | e13 | e8.8 | 9.1 | e3.5 | 2.9 | 66 | 23 | 9.0 | 3.9 | 3.3 | 4.2 |
| 5 | 5.7 | e9.6 | e7.2 | 4.4 | e2.5 | 2.5 | 38 | 20 | 8.2 | 7.7 | 4.1 | 3.3 |
| 6 | 5.1 | e10 | 4.8 | 3.5 | e2.5 | 2.5 | 39 | 21 | 7.7 | 7.8 | 3.1 | 3.3 |
| 7 | 5.0 | e11 | 9.6 | 4.9 | 3.7 | 2.5 | 78 | 21 | 7.1 | 5.4 | 2.8 | 3.4 |
| 8 | 4.9 | e11 | 11 | 4.3 | 6.4 | e7.0 | 85 | 19 | 6.3 | 4.6 | 2.8 | 3.7 |
| 9 | 4.9 | e8.4 | 8.7 | 4.0 | 4.0 | e4.5 | 50 | 24 | 6.8 | 65 | 2.8 | 3.6 |
| 10 | 4.9 | e7.4 | 6.2 | 3.4 | 2.8 | e3.5 | 49 | 35 | 6.7 | 43 | 2.7 | 3.1 |
| 11 | 5.5 | e6.8 | 3.2 | 2.9 | 2.5 | 3.0 | 40 | 42 | 5.7 | 12 | 2.7 | 3.0 |
| 12 | 5.0 | e6.2 | 3.7 | 3.7 | 2.5 | 2.9 | 28 | 45 | 5.3 | 8.6 | 2.6 | 2.8 |
| 13 | 5.1 | e6.0 | e3.1 | 11 | e2.8 | 2.9 | 24 | 20 | 5.2 | 6.8 | 2.6 | 2.8 |
| 14 | 4.9 | e5.8 | e2.7 | 73 | e2.8 | 2.7 | 24 | 16 | 16 | 5.5 | 3.4 | 2.7 |
| 15 | 5.7 | e5.6 | 2.4 | 13 | 2.5 | e2.9 | 25 | 19 | 20 | 6.2 | 3.3 | 3.0 |
| 16 | 23 | e6.0 | 2.6 | 6.9 | 3.6 | e3.6 | 32 | 20 | 18 | 5.0 | 2.9 | 3.1 |
| 17 | 11 | e6.8 | 4.9 | 5.6 | 3.3 | 4.4 | 50 | 16 | 56 | 4.9 | 2.6 | 12 |
| 18 | 8.3 | 7.8 | e3.5 | e5.0 | e2.7 | 4.3 | 58 | 14 | 34 | 4.9 | 2.3 | 16 |
| 19 | 6.2 | 15 | e2.9 | e4.5 | e4.8 | 3.4 | 59 | 13 | 20 | 4.7 | 2.3 | 11 |
| 20 | 5.8 | 11 | 2.5 | e4.1 | e4.7 | 3.5 | 104 | 13 | 14 | 4.3 | 2.5 | 7.6 |
| 21 | 5.6 | 14 | 2.3 | 4.0 | 3.5 | 3.5 | 71 | 12 | 11 | 3.7 | 5.2 | 8.1 |
| 22 | 5.0 | 15 | 4.9 | 3.6 | 3.1 | 4.4 | 38 | 20 | 11 | 3.4 | 3.4 | 5.2 |
| 23 | 4.9 | 11 | 56 | 3.8 | e2.5 | 4.9 | 63 | 20 | 8.9 | 3.2 | 3.0 | 11 |
| 24 | 4.9 | 12 | 45 | 4.4 | e2.5 | 3.8 | 128 | 22 | 7.7 | 3.0 | 2.8 | 7.1 |
| 25 | 4.8 | 78 | e20 | 3.0 | e2.7 | 3.5 | 63 | 16 | 6.6 | 3.0 | 2.5 | 5.1 |
| 26 | 4.6 | 26 | e12 | 2.2 | e2.9 | 4.4 | 40 | 15 | 6.0 | 3.0 | 2.4 | 51 |
| 27 | 4.5 | 16 | 5.9 | 4.0 | e4.0 | e7.0 | 93 | 15 | 5.1 | 25 | 2.3 | 52 |
| 28 | 4.5 | 30 | 8.7 | 5.3 | e3.3 | 10 | 96 | 15 | 4.1 | 12 | 3.4 | 17 |
| 29 | 4.5 | 25 | 7.5 | 3.9 | --- | 13 | 61 | 13 | 4.4 | 5.6 | 2.8 | 20 |
| 30 | 4.4 | 15 | 6.9 | 3.1 | --- | 20 | 49 | 12 | 4.3 | 4.4 | 3.0 | 17 |
| 31 | 6.2 | --- | 9.5 | 2.7 | --- | 29 | --- | 14 | --- | 3.7 | 93 | --- |
| TOTAL | 187.9 | 446.4 | 349.5 | 241.2 | 89.6 | 170.2 | 1,773 | 685 | 349.1 | 282.3 | 183.4 | 313.2 |
| MEAN | 6.06 | 14.9 | 11.3 | 7.78 | 3.20 | 5.49 | 59.1 | 22.1 | 11.6 | 9.11 | 5.92 | 10.4 |
| MAX | 23 | 78 | 56 | 73 | 6.4 | 29 | 131 | 61 | 56 | 65 | 93 | 52 |
| MIN | 4.4 | 5.6 | 2.3 | 2.2 | 2.2 | 2.5 | 24 | 12 | 4.1 | 3.0 | 2.3 | 2.7 |
| CFSM | 1.33 | 3.26 | 2.47 | 1.70 | 0.70 | 1.20 | 12.9 | 4.84 | 2.55 | 1.99 | 1.29 | 2.28 |
| IN. | 1.53 | 3.63 | 2.84 | 1.96 | 0.73 | 1.39 | 14.43 | 5.58 | 2.84 | 2.30 | 1.49 | 2.55 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

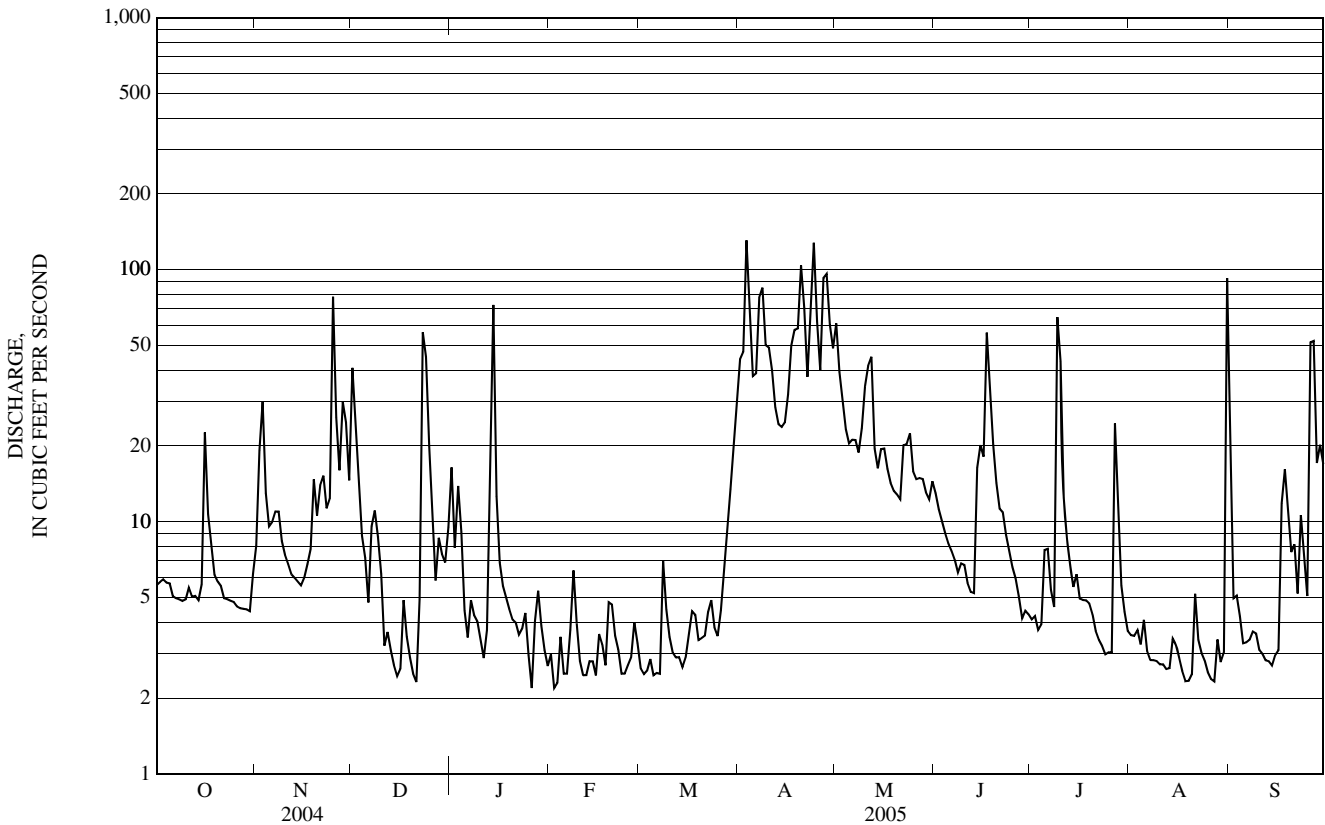
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 15.1 | 18.4 | 9.82 | 5.36 | 3.82 | 11.9 | 50.6 | 36.0 | 20.0 | 13.1 | 10.5 | 12.8 |
| MAX | 31.5 | 29.9 | 16.5 | 7.78 | 5.96 | 21.4 | 62.2 | 46.8 | 33.5 | 28.2 | 25.3 | 18.0 |
| (WY) | (2004) | (2004) | (2004) | (2005) | (2001) | (2003) | (2002) | (2001) | (2002) | (2004) | (2004) | (2004) |
| MIN | 6.06 | 13.8 | 4.24 | 1.56 | 2.47 | 3.34 | 39.2 | 22.1 | 11.6 | 7.64 | 3.36 | 6.84 |
| (WY) | (2005) | (2003) | (2003) | (2002) | (2002) | (2001) | (2003) | (2005) | (2005) | (2003) | (2002) | (2003) |

ST. LAWRENCE RIVER BASIN

04288225 West Branch Little River above Bingham Falls near Stowe, VT

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 2000 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 7,271.1 | | 5,070.8 | | 17.3 | |
| ANNUAL MEAN | 19.9 | | 13.9 | | 13.9 | |
| HIGHEST ANNUAL MEAN | | | | | 23.7 | 2004 |
| LOWEST ANNUAL MEAN | | | | | 13.9 | 2005 |
| HIGHEST DAILY MEAN | 155 | Apr 19 | 131 | Apr 3 | 230 | Apr 24, 2001 |
| LOWEST DAILY MEAN | 2.0 | Feb 5 | a 2.2 | Jan 26 | 0.61 | Feb 25, 2003 |
| ANNUAL SEVEN-DAY MINIMUM | 3.0 | Dec 15 | 2.6 | Mar 1 | 0.77 | Jan 31, 2002 |
| MAXIMUM PEAK FLOW | | | 243 | Aug 31 | b 416 | Nov 20, 2003 |
| MAXIMUM PEAK STAGE | | | 3.12 | Aug 31 | 4.13 | Nov 20, 2003 |
| INSTANTANEOUS LOW FLOW | | | 1.3 | Dec 20 | | |
| ANNUAL RUNOFF (CFSM) | 4.35 | | 3.04 | | 3.79 | |
| ANNUAL RUNOFF (INCHES) | 59.19 | | 41.28 | | 51.44 | |
| 10 PERCENT EXCEEDS | 48 | | 39 | | 44 | |
| 50 PERCENT EXCEEDS | 11 | | 5.6 | | 7.8 | |
| 90 PERCENT EXCEEDS | 4.6 | | 2.7 | | 2.8 | |

a Also occurred on Feb. 2.
 b From rating curve extended above 200 ft³/s.
 c Estimated



04288230 RANCH BROOK AT RANCH CAMP, NEAR STOWE, VT

LOCATION.--Lat 44° 30'14", long 72° 46'56", Lamoille County, Hydrologic Unit 02010003, 300 ft east of Ranch Camp, 1.3 mi upstream of mouth, 1.3 mi west of State Highway 108 crossing of West Branch Little River at Stowe Fork, and 5.4 mi northwest of State Highways 100 and 108 intersection in Stowe.

DRAINAGE AREA.--3.80 mi².

PERIOD OF RECORD.--Discharge records: October 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|---------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Dec 23 | unknown | e180 | *b2.97 | Apr 27 | 1955 | 186 | 2.53 |
| Apr 3 | 0915 | 196 | 2.57 | Aug 31 | 1940 | * 212 | 2.63 |
| Apr 7 | 2115 | 196 | 2.57 | | | | |

Minimum discharge, 0.80 ft³/s, Aug. 26, 27, 28, gage height, 0.79 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1 | 3.5 | 5.3 | 32 | e12 | 3.5 | 3.1 | 37 | 37 | 9.1 | 2.0 | 1.5 | 18 |
| 2 | 3.7 | 14 | 24 | e10 | 3.5 | 3.1 | 45 | 21 | 6.4 | 2.2 | 1.4 | 4.3 |
| 3 | 4.1 | 26 | 12 | 10 | 3.4 | 3.1 | 129 | 16 | 5.2 | 1.8 | 1.3 | 2.5 |
| 4 | 3.8 | 7.8 | e9.6 | 8.0 | 3.4 | 3.0 | 57 | 13 | 4.3 | 1.6 | 1.2 | 1.9 |
| 5 | 4.0 | 7.5 | e8.6 | e7.2 | 3.4 | 2.9 | 26 | 11 | 3.7 | 2.8 | 1.8 | 1.6 |
| 6 | 3.8 | 7.9 | e7.8 | e6.4 | 3.4 | 2.9 | 27 | 10 | 3.4 | 3.9 | 1.3 | 1.4 |
| 7 | 3.8 | 8.8 | e7.0 | e5.8 | 3.5 | 3.0 | 70 | 10 | 3.1 | 2.5 | 1.2 | 1.3 |
| 8 | 3.7 | 8.7 | e6.4 | e5.4 | 6.0 | e5.6 | 70 | 9.0 | 2.8 | 2.1 | 1.1 | 1.5 |
| 9 | 3.7 | 6.4 | e6.0 | e5.0 | 6.6 | e4.6 | 36 | 9.3 | 3.3 | 39 | 1.0 | 1.6 |
| 10 | 3.8 | e5.6 | 5.7 | e4.6 | 4.8 | 4.0 | 33 | 12 | 3.3 | 24 | 1.00 | 1.3 |
| 11 | 4.2 | 5.3 | 7.3 | e4.5 | 4.3 | 3.6 | 26 | 13 | 2.6 | 5.1 | 0.99 | 1.2 |
| 12 | 4.0 | 4.8 | 6.1 | e4.4 | 4.0 | 3.4 | 17 | 18 | 2.4 | 3.0 | 1.00 | 1.1 |
| 13 | 3.9 | e4.6 | 5.6 | e10 | 3.9 | 3.3 | 15 | 8.6 | 2.3 | 2.7 | 1.0 | 1.1 |
| 14 | 3.8 | e4.4 | e5.2 | e48 | 3.8 | 3.2 | 15 | 7.2 | 7.6 | 2.3 | 1.4 | 1.0 |
| 15 | 5.5 | 4.1 | e4.9 | e18 | 3.9 | 3.2 | 15 | 8.1 | 11 | 2.0 | 1.4 | 1.4 |
| 16 | 16 | 4.0 | e4.7 | e13 | 4.3 | 3.2 | 20 | 8.6 | 11 | 1.7 | 1.1 | 2.0 |
| 17 | 7.6 | 4.0 | e4.5 | e10 | 4.4 | 3.2 | 34 | 7.2 | 42 | 1.8 | 1.0 | 10 |
| 18 | 5.6 | 4.1 | e4.4 | e9.0 | 3.9 | 3.2 | 42 | 6.3 | 25 | 1.8 | 0.94 | 11 |
| 19 | 4.7 | 6.0 | e4.3 | e8.0 | 3.7 | 3.1 | 41 | 5.7 | 11 | 2.0 | 0.96 | 5.6 |
| 20 | 4.3 | 5.1 | e4.2 | e7.0 | 3.6 | 3.2 | 88 | 5.3 | 6.9 | 1.7 | 1.1 | 3.5 |
| 21 | 4.0 | 9.5 | e4.1 | e6.4 | 3.5 | 3.2 | 51 | 5.0 | 4.9 | 1.4 | 2.5 | 2.9 |
| 22 | 3.8 | 8.9 | e4.0 | e5.8 | 3.4 | 3.3 | 21 | 6.2 | 4.5 | 1.5 | 1.3 | 2.1 |
| 23 | 3.7 | 6.1 | e5.4 | e5.4 | 3.4 | 3.3 | 48 | 8.0 | 3.5 | 1.5 | 1.2 | 2.7 |
| 24 | 3.6 | 6.4 | e4.0 | e5.0 | 3.3 | 3.3 | 91 | 9.7 | 3.0 | 1.3 | 1.2 | 2.2 |
| 25 | 3.5 | 51 | e2.4 | e4.5 | 3.2 | 3.3 | 40 | 6.7 | 2.6 | 1.3 | 1.1 | 1.9 |
| 26 | 3.4 | 19 | e15 | e4.2 | 3.2 | 3.3 | 22 | 6.1 | 2.3 | 1.3 | 0.93 | 35 |
| 27 | 3.4 | 9.1 | e12 | 4.0 | 3.2 | 3.7 | 61 | 6.2 | 2.2 | 7.4 | 0.89 | 37 |
| 28 | 3.4 | 25 | e10 | 3.8 | 3.1 | 6.1 | 71 | 6.7 | 2.0 | 4.1 | 1.5 | 9.0 |
| 29 | 3.3 | 25 | e8.4 | 3.8 | --- | 9.6 | 44 | 6.2 | 2.1 | 2.0 | 1.2 | 12 |
| 30 | 3.2 | 11 | e7.0 | 3.7 | --- | 11 | 33 | 5.4 | 2.1 | 1.9 | 1.4 | 9.8 |
| 31 | 4.6 | --- | e9.0 | 3.7 | --- | 17 | --- | 11 | --- | 1.5 | 65 | --- |
| TOTAL | 137.4 | 315.4 | 357.8 | 256.6 | 107.6 | 135.0 | 1,325 | 313.5 | 195.6 | 131.2 | 101.91 | 187.9 |
| MEAN | 4.43 | 10.5 | 11.5 | 8.28 | 3.84 | 4.35 | 44.2 | 10.1 | 6.52 | 4.23 | 3.29 | 6.26 |
| MAX | 16 | 51 | 54 | 48 | 6.6 | 17 | 129 | 37 | 42 | 39 | 65 | 37 |
| MIN | 3.2 | 4.0 | 4.0 | 3.7 | 3.1 | 2.9 | 15 | 5.0 | 2.0 | 1.3 | 0.89 | 1.0 |
| CFSM | 1.17 | 2.77 | 3.04 | 2.18 | 1.01 | 1.15 | 11.6 | 2.66 | 1.72 | 1.11 | 0.87 | 1.65 |
| IN. | 1.35 | 3.09 | 3.50 | 2.51 | 1.05 | 1.32 | 12.97 | 3.07 | 1.91 | 1.28 | 1.00 | 1.84 |

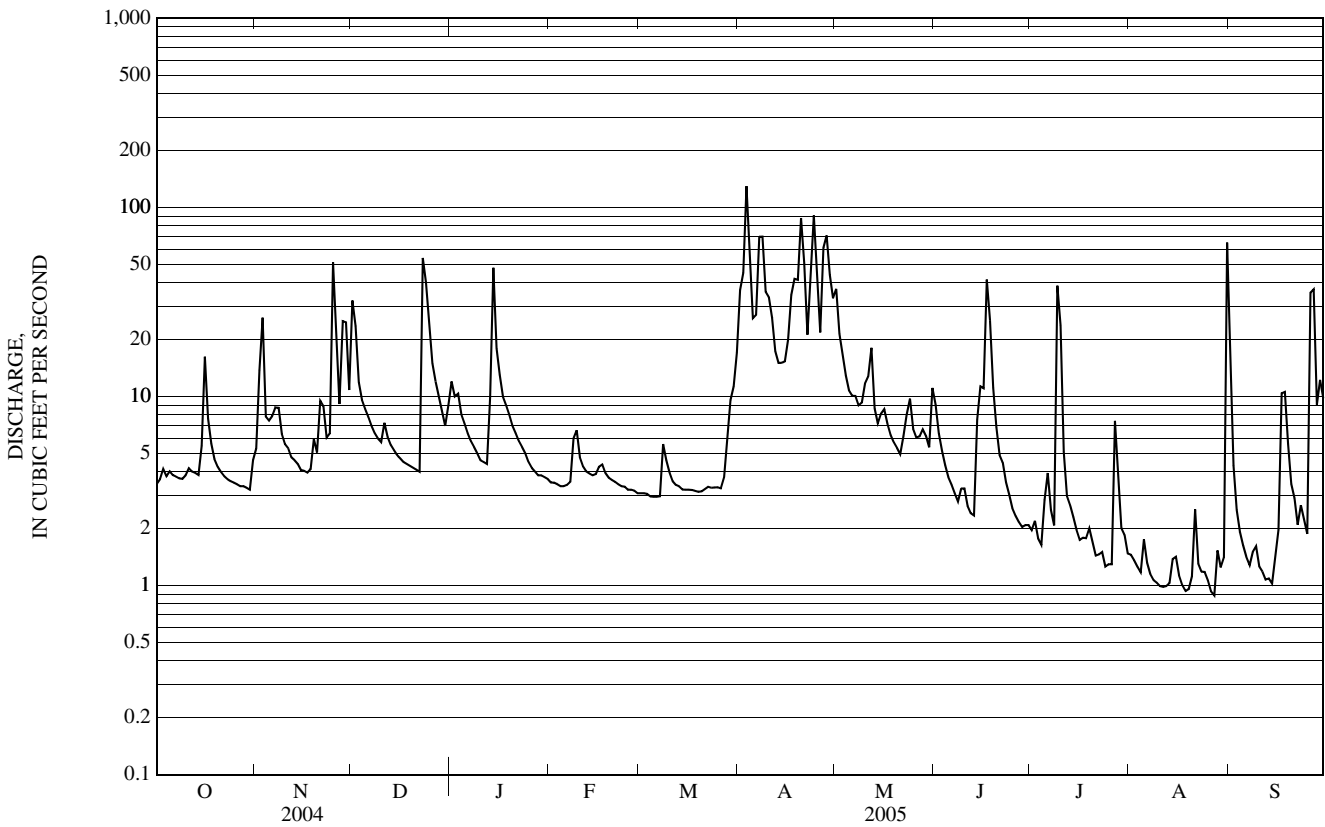
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 9.79 | 12.5 | 9.39 | 5.25 | 3.87 | 8.85 | 37.0 | 18.8 | 11.4 | 6.95 | 5.88 | 7.70 |
| MAX | 19.7 | 19.8 | 14.2 | 8.28 | 5.71 | 16.5 | 44.2 | 25.2 | 22.2 | 15.5 | 15.5 | 11.1 |
| (WY) | (2004) | (2004) | (2004) | (2005) | (2001) | (2003) | (2005) | (2002) | (2002) | (2004) | (2004) | (2004) |
| MIN | 4.43 | 8.29 | 6.54 | 3.28 | 2.75 | 2.29 | 28.1 | 10.1 | 6.52 | 3.76 | 1.97 | 3.48 |
| (WY) | (2005) | (2001) | (2002) | (2001) | (2003) | (2001) | (2003) | (2005) | (2005) | (2001) | (2002) | (2003) |

04288230 RANCH BROOK AT RANCH CAMP, NEAR STOWE, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 2001 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 4,776.2 | | 3,564.91 | | 11.4 | |
| ANNUAL MEAN | 13.0 | | 9.77 | | 9.39 | |
| HIGHEST ANNUAL MEAN | | | | | 15.3 | 2004 |
| LOWEST ANNUAL MEAN | | | | | 9.39 | 2001 |
| HIGHEST DAILY MEAN | 140 | Apr 19 | 129 | Apr 3 | 205 | Apr 24, 2001 |
| LOWEST DAILY MEAN | 2.5 | Feb 27 | 0.89 | Aug 27 | 0.79 | Sep 10, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 2.6 | Feb 22 | 1.0 | Aug 7 | 0.92 | Sep 4, 2002 |
| MAXIMUM PEAK FLOW | | | 212 | Aug 31 | a 366 | Nov 19, 2003 |
| MAXIMUM PEAK STAGE | | | b 2.97 | Dec 23 | 3.09 | Nov 19, 2003 |
| INSTANTANEOUS LOW FLOW | | | c 0.80 | Aug 26 | d 0.70 | Sep 9, 2002 |
| ANNUAL RUNOFF (CFSM) | 3.43 | | 2.57 | | 3.01 | |
| ANNUAL RUNOFF (INCHES) | 46.76 | | 34.90 | | 40.91 | |
| 10 PERCENT EXCEEDS | 31 | | 25 | | 27 | |
| 50 PERCENT EXCEEDS | 6.3 | | 4.3 | | 5.4 | |
| 90 PERCENT EXCEEDS | 3.4 | | 1.4 | | 2.0 | |

- a From rating curve extended above 140 f³/s.
- b Ice jam.
- c Also occurred on Aug. 27,28, 2005.
- d Also occurred on Sept. 10-11, 2002.
- e Estimated



04288500 WATERBURY RESERVOIR NEAR WATERBURY, VT

LOCATION.--Lat 44° 22' 54", long 72° 46' 13", Washington County, Hydrologic Unit 02010003, at dam on Little River, 0.3 mi east of Recreational Highway and Waterbury Dam Road intersection, 2.5 mi upstream of mouth, 2.8 mi north of US Highway 2 and State Highway 100 intersection in Waterbury.

DRAINAGE AREA.--109 mi².

PERIOD OF RECORD.--Elevation: September 1937 to current year. September 1937 to September 1938 monthend contents only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Corps of Engineers). Prior to December 10, 1938, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers during summer of 1937 for flood control and storage of water for power. Usable capacity for storage of water for power, 1.58 billion ft³ between elevations 500.0 ft and 592.0 ft, sill of taintor gate; for flood control, 1.23 billion ft³, between elevations 592.0 ft and 617.5 ft, crest of spillway; total usable capacity, 2.81 billion ft³.

Capacity table

| Elevation, in feet | Contents, in millions of cubic feet |
|-----------------------|---|
| 500.0 | 0 |
| 510.0 | 34.8 |
| 520.0 | 92.6 |
| 530.0 | 180.8 |
| 540.0 | 302.7 |
| 550.0 | 461.7 |
| 560.0 | 658.8 |
| 570.0 | 891.9 |
| 580.0 | 1,168.5 |
| 590.0 | 1,505.0 |
| 600.0 | 1,913.4 |

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 613.45 ft, May 4, 1940; minimum observed, 501.30 ft, October 16, 1938, July 3, 12, and 13, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation at 2400 hours, 569.34 ft, Apr. 3; minimum daily elevation at 2400 hours, 548.98 ft, Feb. 4.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 549.71 | 550.27 | 554.57 | 550.44 | 550.53 | 550.24 | 554.62 | 549.06 | 551.06 | 549.79 | 549.97 | 553.85 |
| 2 | 549.98 | 550.98 | 554.18 | 550.39 | 550.23 | 549.89 | 557.90 | 549.33 | 550.77 | 549.66 | 549.64 | 552.61 |
| 3 | 549.57 | 551.51 | 552.56 | 550.59 | 549.59 | 550.26 | 569.34 | 549.53 | 550.20 | 549.81 | 549.31 | 551.14 |
| 4 | 549.85 | 551.50 | 551.54 | 551.05 | 548.98 | 550.29 | 567.84 | 550.82 | 549.86 | 549.47 | 549.45 | 549.96 |
| 5 | 549.71 | 550.67 | 550.23 | 550.81 | 549.41 | 550.65 | 566.79 | 551.27 | 550.29 | 549.75 | 549.08 | 549.66 |
| 6 | 549.74 | 551.05 | 549.93 | 550.57 | 549.31 | 551.01 | 565.85 | 551.92 | 549.80 | 549.54 | 549.23 | 549.70 |
| 7 | 549.82 | 551.05 | 550.81 | 550.40 | 549.79 | 550.32 | 567.25 | 551.71 | 549.18 | 549.78 | 549.34 | 549.87 |
| 8 | 550.04 | 550.93 | 551.15 | 550.20 | 550.42 | 550.93 | 567.64 | 551.34 | 549.51 | 549.46 | 549.41 | 550.05 |
| 9 | 550.26 | 550.73 | 550.80 | 550.92 | 550.77 | 550.76 | 566.34 | 550.91 | 549.40 | 552.22 | 549.52 | 549.40 |
| 10 | 550.46 | 550.40 | 551.02 | 550.72 | 550.93 | 550.67 | 564.74 | 550.78 | 549.83 | 552.29 | 549.61 | 549.56 |
| 11 | 550.67 | 550.88 | 551.30 | 550.30 | 550.49 | 550.35 | 562.56 | 550.78 | 549.62 | 551.49 | 549.70 | 549.68 |
| 12 | 550.87 | 550.40 | 550.69 | 550.08 | 550.32 | 550.36 | 559.87 | 550.81 | 549.96 | 550.91 | 549.78 | 549.79 |
| 13 | 551.07 | 549.83 | 551.25 | 549.88 | 550.14 | 550.81 | 556.86 | 550.57 | 550.01 | 550.41 | 549.87 | 549.91 |
| 14 | 551.28 | 550.17 | 551.39 | 553.36 | 550.02 | 550.31 | 553.68 | 550.57 | 550.01 | 550.09 | 550.01 | 550.01 |
| 15 | 551.06 | 550.58 | 551.12 | 552.74 | 550.60 | 549.93 | 551.41 | 550.81 | 551.84 | 549.81 | 549.77 | 550.21 |
| 16 | 551.45 | 550.95 | 550.40 | 551.69 | 550.26 | 550.10 | 551.51 | 550.89 | 551.46 | 549.68 | 549.89 | 549.97 |
| 17 | 551.26 | 550.69 | 550.45 | 550.92 | 550.60 | 550.30 | 551.72 | 550.69 | 553.13 | 549.90 | 549.97 | 550.35 |
| 18 | 550.80 | 550.63 | 550.26 | 550.46 | 550.16 | 550.44 | 552.04 | 550.48 | 553.14 | 549.90 | 550.04 | 550.27 |
| 19 | 550.62 | 550.70 | 550.90 | 550.03 | 550.69 | 550.88 | 551.21 | 550.22 | 552.13 | 549.69 | 549.63 | 549.92 |
| 20 | 550.13 | 551.17 | 550.30 | 549.89 | 550.76 | 551.32 | 554.54 | 549.84 | 550.69 | 549.43 | 549.75 | 549.75 |
| 21 | 550.10 | 551.98 | 550.18 | 550.00 | 550.43 | 551.57 | 553.99 | 550.16 | 549.61 | 549.61 | 550.44 | 550.04 |
| 22 | 550.40 | 551.46 | 550.37 | 550.57 | 550.17 | 552.08 | 551.28 | 550.99 | 549.55 | 549.18 | 549.93 | 549.87 |
| 23 | 550.68 | 550.76 | 553.94 | 551.11 | 549.90 | 552.58 | 551.55 | 551.07 | 549.27 | 549.35 | 549.65 | 549.62 |
| 24 | 550.94 | 550.60 | 554.19 | 550.66 | 549.69 | 553.09 | 553.75 | 551.15 | 549.19 | 549.49 | 549.44 | 549.82 |
| 25 | 550.82 | 552.64 | 551.86 | 550.40 | 550.12 | 553.63 | 552.78 | 550.80 | 549.51 | 549.41 | 549.54 | 549.99 |
| 26 | 550.41 | 552.60 | 551.09 | 550.21 | 550.21 | 552.54 | 550.68 | 550.52 | 549.77 | 549.60 | 549.62 | 550.50 |
| 27 | 549.73 | 551.77 | 550.51 | 550.04 | 550.60 | 551.96 | 550.43 | 550.72 | 549.34 | 550.47 | 549.70 | 551.04 |
| 28 | 549.51 | 552.35 | 550.20 | 550.25 | 550.64 | 551.71 | 551.55 | 550.96 | 549.55 | 550.16 | 549.85 | 549.88 |
| 29 | 549.28 | 552.67 | 550.26 | 550.70 | --- | 551.87 | 550.78 | 551.00 | 549.77 | 549.92 | 549.60 | 550.30 |
| 30 | 549.54 | 551.95 | 550.37 | 551.14 | --- | 552.06 | 549.34 | 550.85 | 549.60 | 550.15 | 549.40 | 550.40 |
| 31 | 549.91 | --- | 550.41 | 550.83 | --- | 554.10 | --- | 551.13 | --- | 550.33 | 553.94 | --- |

ST. LAWRENCE RIVER BASIN

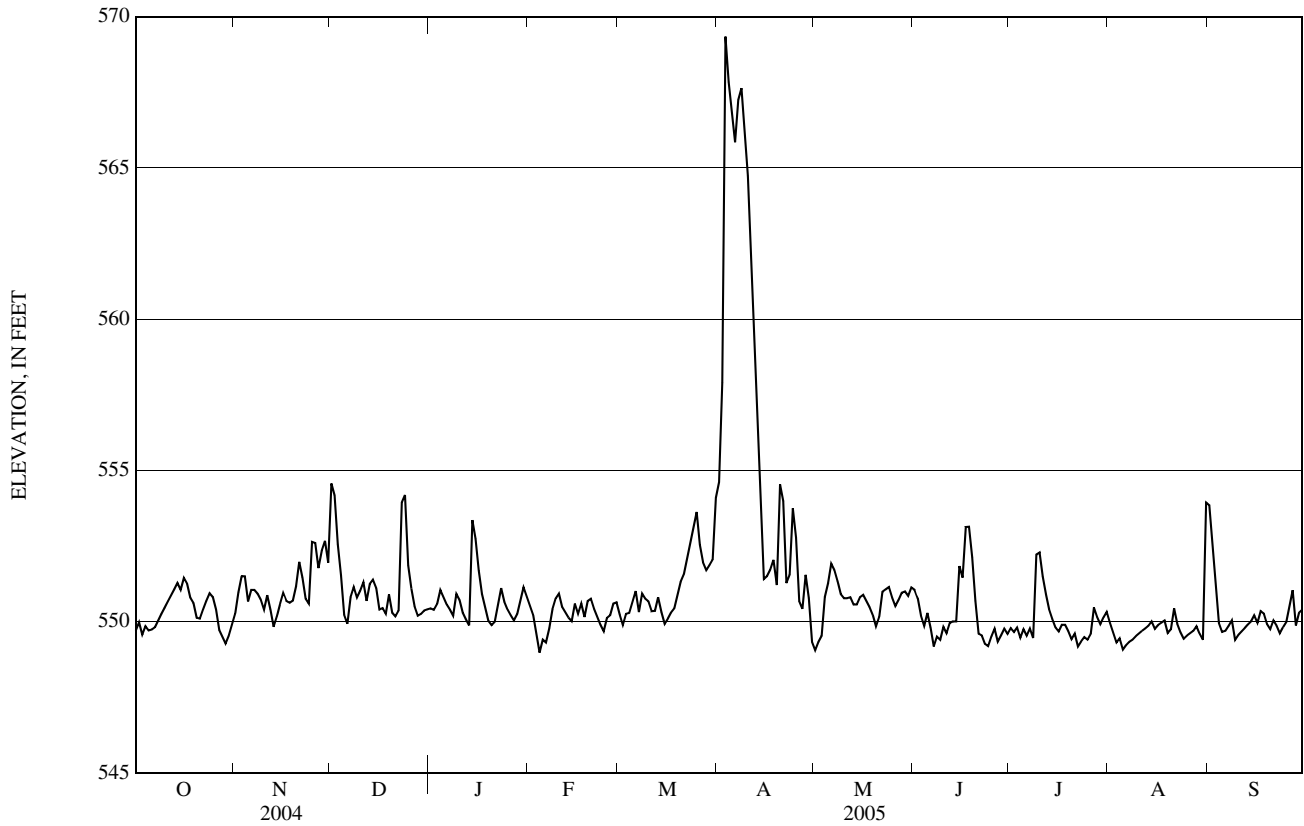
04288500 WATERBURY RESERVOIR NEAR WATERBURY, VT—Continued

ELEVATION ABOVE NGVD 1929, FEET—CONTINUED
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
 DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------|--------|-------------|------------|------------|-----------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 550.31 | 551.13 | 551.23 | 550.69 | 550.21 | 551.19 | 556.99 | 550.70 | 550.24 | 550.02 | 549.81 | 550.24 |
| MAX | 551.45 | 552.67 | 554.57 | 553.36 | 550.93 | 554.10 | 569.34 | 551.92 | 553.14 | 552.29 | 553.94 | 553.85 |
| MIN | 549.28 | 549.83 | 549.93 | 549.88 | 548.98 | 549.89 | 549.34 | 549.06 | 549.18 | 549.18 | 549.08 | 549.40 |
| (†) | 460.17 | 498.35 | 469.39 | 477.27 | 473.66 | 538.70 | 450.58 | 482.87 | 454.90 | 467.87 | 535.76 | 469.20 |
| (‡) | -0.84 | +14.73 | -10.81 | +2.94 | -1.49 | +24.28 | -34.00 | +12.06 | -10.79 | +4.84 | +25.35 | -25.68 |
| CAL YR | 2004 | MEAN 551.13 | MAX 558.93 | MIN 548.46 | (‡) -0.85 | | | | | | | |
| WTR YR | 2005 | MEAN 551.06 | MAX 569.34 | MIN 548.98 | (‡) +0.21 | | | | | | | |

(†) Contents, in millions of cubic feet, at end of month.

(‡) Change in contents, equivalent in cubic feet per second.



04289000 LITTLE RIVER NEAR WATERBURY, VT

LOCATION.--Lat 44° 22' 12", long 72° 46' 11", Washington County, Hydrologic Unit 02010003, on right bank, 0.8 mi downstream from spillway on Waterbury Reservoir, 1.7 mi upstream from mouth, and 2.0 mi north of US Highway 2 and State Highway 100 intersection in Waterbury.

DRAINAGE AREA.--111 mi².

PERIOD OF RECORD.--Discharge records: July to October 1910 (gage heights only), October 1935 to current year. October, November 1935 monthly discharge only, published in WSP 1307. Monthly discharges only for July, August, and September 1937. Prior to October 1962, published as Waterbury River near Waterbury.

REVISED RECORDS.--WSP 824: 1936.

GAGE.--Water-stage recorder. Concrete control since December 8, 1937. Datum of gage is 428.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). July 7 to October 31, 1910, nonrecording gage at site 2 mi upstream at different datum.

REMARKS.-- Records good except those for estimated daily discharges, which are fair. Flow completely regulated by Waterbury Reservoir (station 04288500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft³/s, March 18, 1936, gage height, 19.38 ft; minimum daily discharge, 0.6 ft³/s several times during summers of 1938-39, 1941, and 1944. Maximum discharge since construction of Waterbury Reservoir in 1937, 4,080 ft³/s, December 9, 1937, gage height, 14.88 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft³/s, Apr. 7, 8, gage height, 8.80 ft; minimum daily discharge, 11 ft³/s, on many days during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | e123 | e11 | e390 | e325 | e136 | 160 | 897 | 929 | 229 | 12 | 168 | 444 |
| 2 | 11 | e11 | e554 | e327 | e130 | 142 | 1,060 | 660 | 231 | 75 | 130 | 441 |
| 3 | e99 | e210 | 678 | e272 | e195 | e11 | 808 | 445 | 265 | 12 | 115 | 436 |
| 4 | 11 | e238 | 588 | e286 | 193 | e63 | 1,080 | 111 | 195 | 116 | 12 | 376 |
| 5 | e79 | e353 | 463 | e140 | 12 | e11 | 1,280 | 200 | 13 | 13 | 131 | 123 |
| 6 | 50 | e119 | e276 | e195 | 100 | 11 | 1,280 | 220 | 202 | 140 | 12 | 40 |
| 7 | 41 | e191 | e12 | e199 | 11 | 201 | 1,280 | 315 | 218 | 13 | 11 | 12 |
| 8 | 11 | e190 | e289 | e187 | 12 | 54 | 1,290 | 330 | 18 | 127 | 11 | 12 |
| 9 | 11 | e249 | e283 | e12 | 117 | e153 | 1,290 | 242 | 113 | 83 | 11 | 189 |
| 10 | 11 | e74 | e90 | e188 | 187 | e123 | 1,280 | 280 | 12 | 442 | 11 | 12 |
| 11 | 11 | e11 | e222 | e191 | 130 | e160 | 1,270 | 267 | 123 | 378 | 11 | 11 |
| 12 | 11 | e186 | e387 | e192 | 146 | 99 | 1,260 | 302 | 13 | 224 | 11 | 11 |
| 13 | 11 | e184 | e209 | e207 | 132 | 12 | 1,240 | 257 | 13 | 210 | 11 | 11 |
| 14 | 11 | e11 | e41 | e299 | e123 | 180 | 1,230 | 184 | 19 | 163 | 11 | 11 |
| 15 | e118 | e75 | e268 | 541 | 12 | 159 | 1,120 | 162 | 167 | 136 | 93 | 11 |
| 16 | e140 | e12 | e192 | 538 | 197 | 58 | 810 | 209 | 426 | 95 | 12 | 107 |
| 17 | e162 | e126 | e124 | e430 | 76 | 54 | 551 | 234 | 440 | 12 | 12 | 109 |
| 18 | e200 | e91 | e148 | e206 | 195 | 65 | 552 | 217 | 496 | 59 | 12 | 201 |
| 19 | e82 | e78 | e12 | e202 | 12 | 12 | 553 | 217 | 543 | 129 | 114 | 184 |
| 20 | e217 | e12 | e208 | e173 | e75 | 12 | 556 | 234 | 538 | 126 | 11 | 122 |
| 21 | e128 | e12 | e105 | e96 | e156 | 52 | 700 | 71 | 481 | 12 | 16 | 11 |
| 22 | e11 | e274 | e69 | e12 | 145 | 12 | 904 | 207 | 154 | 144 | 165 | 93 |
| 23 | e11 | e264 | e190 | e12 | 140 | 12 | 1,050 | 227 | 168 | 12 | 100 | 109 |
| 24 | e11 | e175 | 785 | e195 | e122 | 12 | 1,060 | 262 | 108 | 11 | 80 | 11 |
| 25 | e80 | e283 | 842 | e159 | e12 | 13 | 1,060 | 426 | 13 | 54 | 12 | 11 |
| 26 | e124 | e392 | 673 | e138 | e56 | 308 | 1,030 | 175 | 13 | 11 | 11 | 128 |
| 27 | e186 | e390 | e359 | e124 | e12 | 434 | 1,040 | 162 | 155 | 119 | 11 | 415 |
| 28 | e91 | e388 | e238 | e50 | e67 | 255 | 1,040 | 149 | 13 | 235 | 12 | 424 |
| 29 | e95 | e225 | e188 | e12 | --- | 437 | 1,020 | 163 | 13 | 136 | 93 | 131 |
| 30 | e11 | e391 | e136 | e12 | --- | 477 | 1,040 | 204 | 93 | 11 | 84 | 148 |
| 31 | e11 | --- | e195 | e141 | --- | 505 | --- | 210 | --- | 11 | 202 | --- |
| TOTAL | 2,169 | 5,226 | 9,214 | 6,061 | 2,901 | 4,257 | 30,631 | 8,271 | 5,485 | 3,321 | 1,696 | 4,344 |
| MEAN | 70.0 | 174 | 297 | 196 | 104 | 137 | 1,021 | 267 | 183 | 107 | 54.7 | 145 |
| MAX | 217 | 392 | 842 | 541 | 197 | 505 | 1,290 | 929 | 543 | 442 | 202 | 444 |
| MIN | 11 | 11 | 12 | 12 | 11 | 11 | 551 | 71 | 12 | 11 | 11 | 11 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2005, BY WATER YEAR (WY)

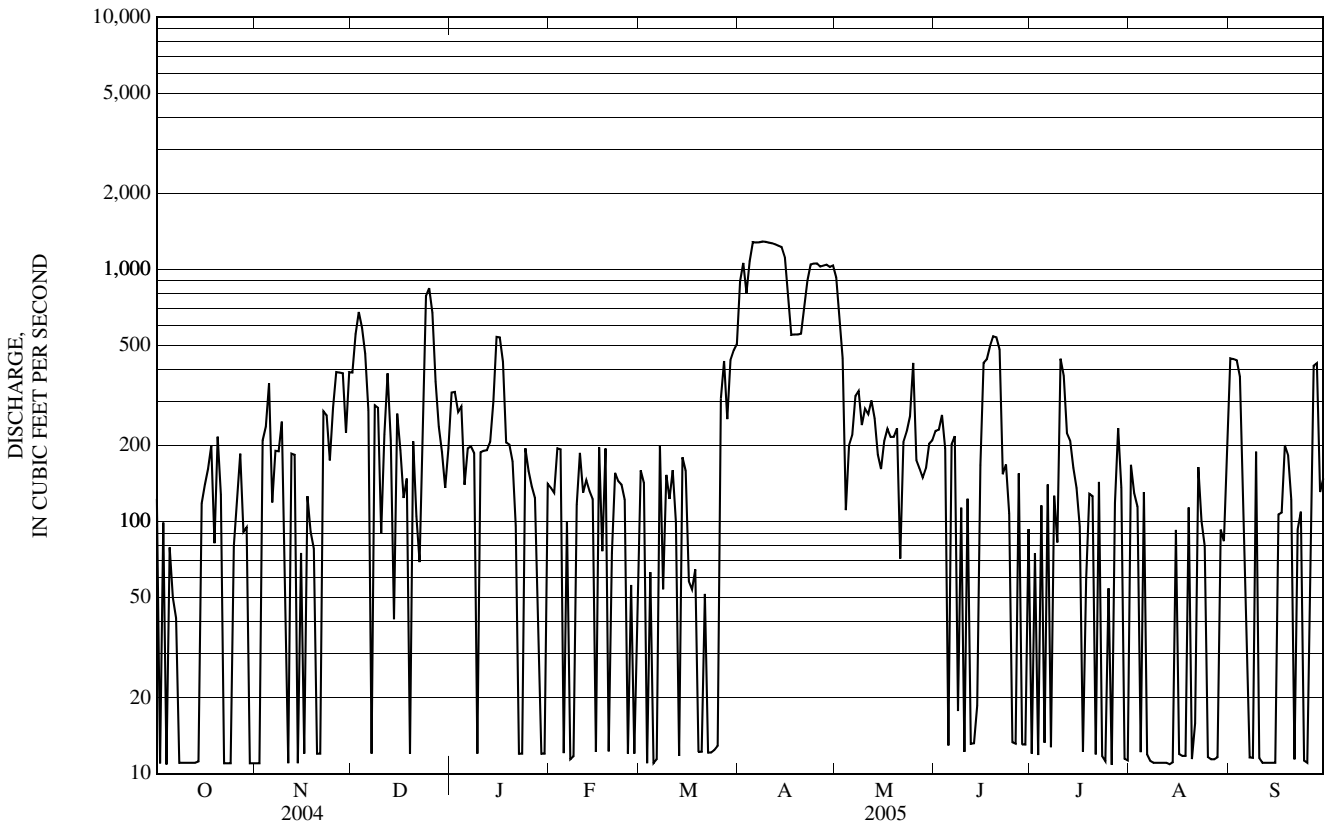
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 182 | 227 | 235 | 217 | 251 | 303 | 479 | 399 | 216 | 145 | 149 | 141 |
| MAX | 749 | 617 | 477 | 476 | 527 | 1,121 | 1,111 | 954 | 646 | 433 | 421 | 375 |
| (WY) | (1946) | (2004) | (1974) | (1991) | (1947) | (1936) | (1976) | (1940) | (1973) | (1973) | (1962) | (1938) |
| MIN | 18.9 | 10.4 | 9.39 | 16.8 | 53.3 | 12.0 | 72.4 | 28.8 | 1.31 | 31.4 | 28.5 | 30.4 |
| (WY) | (1942) | (1941) | (1939) | (1938) | (1936) | (1938) | (1940) | (1938) | (1938) | (1977) | (1999) | (1984) |

ST. LAWRENCE RIVER BASIN

04289000 LITTLE RIVER NEAR WATERBURY, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1936 - 2005 | |
|--------------------------|------------------------|--------|---------------------|-------|-------------------------|--------------|
| ANNUAL TOTAL | 91,506.1 | | 83,576 | | 244 | |
| ANNUAL MEAN | 250 | | 229 | | 146 | |
| HIGHEST ANNUAL MEAN | | | | | 456 | 1976 |
| LOWEST ANNUAL MEAN | | | | | 146 | 1965 |
| HIGHEST DAILY MEAN | a 1,010 | Mar 28 | b 1,290 | Apr 8 | 4,830 | Mar 18, 1936 |
| LOWEST DAILY MEAN | 8.1 | Feb 1 | c 11 | Oct 2 | d 0.60 | Jul 10, 1938 |
| ANNUAL SEVEN-DAY MINIMUM | 11 | Oct 8 | 11 | Oct 8 | 0.70 | Jul 13, 1938 |
| MAXIMUM PEAK FLOW | | | 1,300 | Apr 7 | 6,520 | Mar 18, 1936 |
| MAXIMUM PEAK STAGE | | | 8.80 | Apr 7 | 19.38 | Mar 18, 1936 |
| 10 PERCENT EXCEEDS | 473 | | 552 | | 557 | |
| 50 PERCENT EXCEEDS | 183 | | 140 | | 190 | |
| 90 PERCENT EXCEEDS | 11 | | 11 | | 9.2 | |

- a Also occurred on Mar. 29, 2004.
- b Also occurred on Apr. 9.
- c Also occurred many other days in Oct., Nov., Feb., Mar., Jul., Aug., and Sept.
- d See Extremes for period of record.
- e Estimated



04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT

LOCATION.--Lat 44° 28'44", long 73° 08'21", Chittenden County, Hydrologic Unit 02010003, on right bank, 0.3 mi downstream from Muddy Brook, 1.5 mi downstream of State Highway 2A bridge, 1.6 mi southwest of Town Hall in Essex Junction, and 1.8 mi northeast of US 2 and State Highway 116 intersection in South Burlington.

DRAINAGE AREA.--1,044 mi².

PERIOD OF RECORD.--Discharge records: October 1928 to current year.

REVISED RECORDS.--WSP 714: 1930(M), WSP 894: Drainage area. WSP 1307: 1929(M).

GAGE.--Water-stage recorder. Elevation of gage is 185 ft above National Geodetic Vertical Datum of 1929, from topographic map; prior to October 1, 1964, datum was 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by power plants upstream, by Peacham Pond and Mollys Falls Reservoir, combined usable capacity, 492 million ft³, by Waterbury Reservoir (station 04288500) since 1937, and by East Barre and Wrightsville Detention Reservoirs (Reservoirs in Winooski River Basin above Montpelier) since 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 113,000 ft³/s, November 4, 1927, gage height, 50.4 ft, present datum, from floodmarks, from rating curve extended above 25,000 ft³/s on basis of computations of flow over dam at gage heights 19.72, 24.54, and 51.4 ft, and slope-area measurements at gage height 51.4 ft, all at present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,700 ft³/s, Apr. 4, gage height, 14.63 ft; minimum daily discharge, 268 ft³/s, Aug. 13.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 1 | 589 | 425 | 2,470 | e1,620 | e800 | e720 | 9,430 | 5,680 | 1,720 | 767 | 470 | 6,080 |
| 2 | 477 | 443 | 6,540 | e1,860 | e840 | e650 | 10,400 | 4,680 | 1,320 | 614 | 890 | 2,780 |
| 3 | 506 | 673 | 3,780 | e1,690 | e850 | e700 | 17,800 | 3,670 | 1,160 | 604 | 705 | 1,620 |
| 4 | 499 | 1,010 | 2,710 | e1,780 | e910 | e630 | 19,600 | 2,910 | 984 | 520 | 520 | 1,240 |
| 5 | 458 | 950 | 2,070 | e1,710 | e880 | e620 | 9,690 | 2,450 | 848 | 555 | 441 | 859 |
| 6 | 440 | 1,050 | 1,590 | e1,490 | e720 | e610 | 8,560 | 2,150 | 773 | 926 | 565 | 661 |
| 7 | 437 | 979 | 1,250 | e1,400 | e680 | e620 | 9,140 | 2,050 | 804 | 841 | 404 | 496 |
| 8 | 408 | 902 | 1,390 | e1,300 | e730 | e860 | 10,000 | 2,040 | 854 | 682 | 364 | 449 |
| 9 | 385 | 968 | 1,810 | e1,160 | e960 | e980 | 8,230 | 1,900 | 666 | 2,540 | 301 | 477 |
| 10 | 382 | 730 | 1,580 | e1,080 | e1,100 | e1,030 | 7,040 | 1,710 | 1,020 | 8,690 | 312 | 521 |
| 11 | 374 | 620 | 2,080 | e1,200 | e1,020 | e980 | 6,490 | 1,680 | 947 | 3,190 | 288 | 402 |
| 12 | 390 | 603 | 2,850 | e1,130 | e1,000 | 903 | 5,380 | 1,590 | 734 | 1,770 | 272 | 335 |
| 13 | 374 | 722 | 2,220 | e1,250 | e930 | 818 | 4,740 | 1,480 | 646 | 1,240 | 268 | 332 |
| 14 | 361 | 604 | e1,520 | 6,300 | e920 | 739 | 4,180 | 1,250 | 732 | 1,020 | 282 | 326 |
| 15 | 369 | 498 | e1,120 | 7,000 | e960 | 878 | 3,750 | 1,220 | 2,560 | 1,000 | 325 | 308 |
| 16 | 630 | 520 | e1,160 | 2,890 | e1,070 | 829 | 3,380 | 1,490 | 3,040 | 840 | 376 | 505 |
| 17 | 920 | 577 | e1,200 | e1,870 | e1,130 | 743 | 2,930 | 1,700 | 5,890 | 934 | 295 | 759 |
| 18 | 804 | 609 | e960 | e1,370 | e1,190 | 753 | 3,110 | 1,430 | 9,120 | 737 | 275 | 1,020 |
| 19 | 673 | 581 | e1,030 | e1,260 | e1,000 | 831 | 3,020 | 1,280 | 5,570 | 705 | 272 | 903 |
| 20 | 612 | 552 | e800 | e1,300 | e900 | 785 | 3,150 | 1,230 | 3,390 | 704 | 314 | 710 |
| 21 | 611 | 579 | e900 | e1,400 | e960 | 776 | 4,890 | 1,070 | 2,480 | 579 | 598 | 581 |
| 22 | 501 | 808 | e890 | e1,070 | e980 | 854 | 3,840 | 1,120 | 1,900 | 519 | 1,020 | 477 |
| 23 | 429 | 980 | e1,300 | e970 | e910 | 926 | 4,980 | 1,840 | 1,700 | 666 | 691 | 395 |
| 24 | 410 | 898 | e9,000 | e950 | e900 | 961 | 9,100 | 2,370 | 1,350 | 577 | 525 | 449 |
| 25 | 431 | 1,540 | e4,600 | e1,030 | e780 | 1,040 | 8,420 | 2,110 | 1,090 | 556 | 481 | 338 |
| 26 | 475 | 3,570 | e2,700 | e1,060 | e750 | 1,130 | 5,980 | 1,570 | 867 | 431 | 409 | 427 |
| 27 | 571 | 2,160 | e2,200 | e980 | e700 | 1,500 | 4,380 | 1,470 | 833 | 684 | 348 | 1,310 |
| 28 | 496 | 1,690 | e1,950 | e850 | e710 | 1,870 | 7,000 | 1,410 | 812 | 1,450 | 291 | 1,330 |
| 29 | 460 | 2,830 | e2,120 | e810 | --- | 3,250 | 6,860 | 1,280 | 1,000 | 1,050 | 309 | 960 |
| 30 | 445 | 2,400 | e1,890 | e760 | --- | 3,800 | 5,240 | 1,290 | 873 | 619 | 432 | 821 |
| 31 | 427 | --- | e1,550 | e730 | --- | 5,190 | --- | 1,420 | --- | 483 | 1,470 | --- |
| TOTAL | 15,344 | 31,471 | 69,230 | 51,270 | 25,280 | 36,976 | 210,710 | 60,540 | 55,683 | 36,493 | 14,513 | 27,871 |
| MEAN | 495 | 1,049 | 2,233 | 1,654 | 903 | 1,193 | 7,024 | 1,953 | 1,856 | 1,177 | 468 | 929 |
| MAX | 920 | 3,570 | 9,000 | 7,000 | 1,190 | 5,190 | 19,600 | 5,680 | 9,120 | 8,690 | 1,470 | 6,080 |
| MIN | 361 | 425 | 800 | 730 | 680 | 610 | 2,930 | 1,070 | 646 | 431 | 268 | 308 |

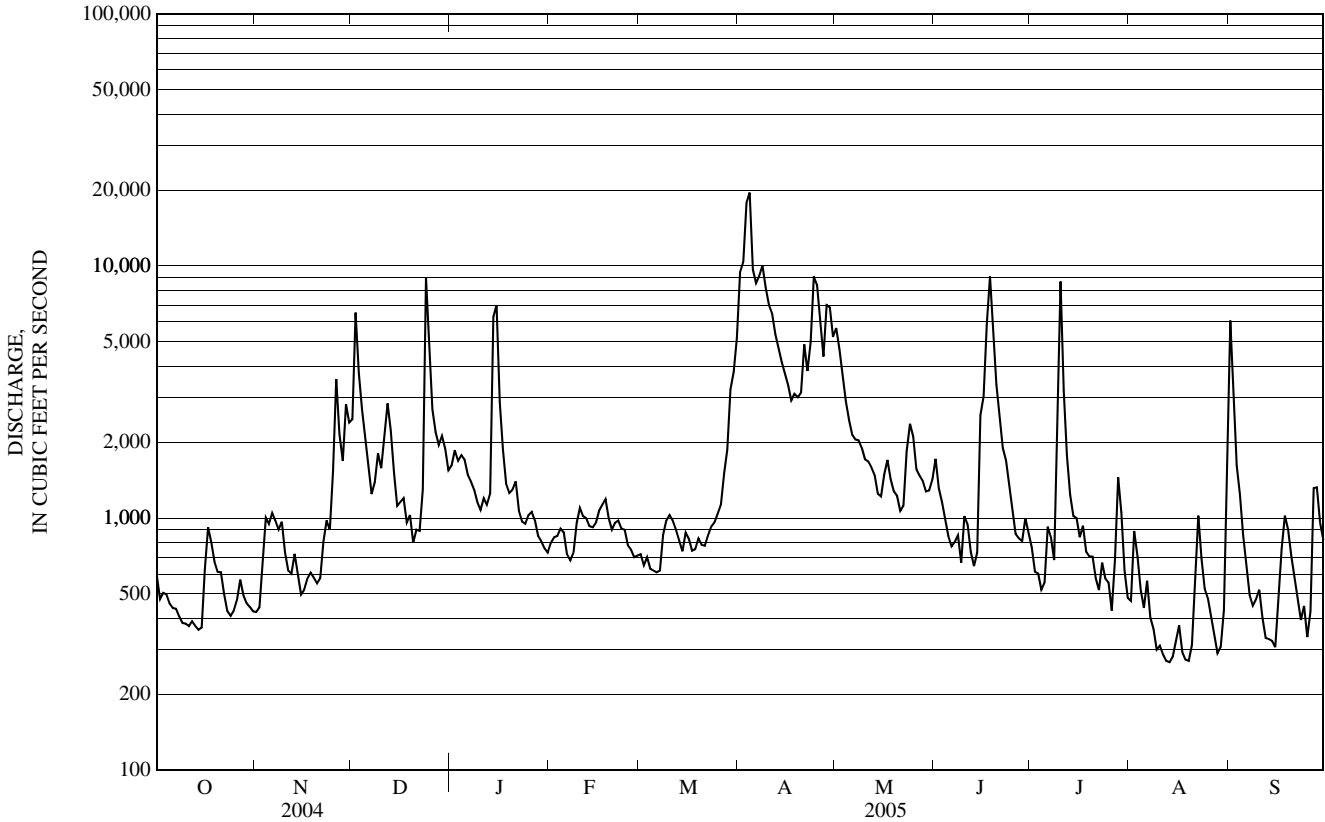
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1,147 | 1,614 | 1,536 | 1,331 | 1,226 | 2,582 | 5,155 | 2,795 | 1,325 | 795 | 736 | 717 |
| MAX | 4,587 | 4,155 | 4,549 | 3,704 | 4,266 | 9,642 | 9,256 | 6,826 | 5,027 | 3,368 | 3,284 | 3,096 |
| (WY) | (1946) | (2004) | (1974) | (1998) | (1981) | (1936) | (1933) | (1972) | (1947) | (1973) | (1976) | (1938) |
| MIN | 245 | 389 | 378 | 350 | 337 | 554 | 1,477 | 846 | 364 | 297 | 171 | 231 |
| (WY) | (1964) | (1954) | (1930) | (1931) | (1940) | (1940) | (1995) | (1965) | (1938) | (1965) | (2001) | (1963) |

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1929 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 623,070 | | 635,381 | | 1,746 | |
| ANNUAL MEAN | 1,702 | | 1,741 | | 832 | |
| HIGHEST ANNUAL MEAN | | | | | 2,751 | 1973 |
| LOWEST ANNUAL MEAN | | | | | 832 | 1965 |
| HIGHEST DAILY MEAN | 11,700 | Mar 27 | 19,600 | Apr 4 | 41,600 | Mar 19, 1936 |
| LOWEST DAILY MEAN | 361 | Oct 14 | 268 | Aug 13 | 24 | Sep 7, 1968 |
| ANNUAL SEVEN-DAY MINIMUM | 376 | Oct 9 | 293 | Aug 9 | 54 | Aug 5, 1964 |
| MAXIMUM PEAK FLOW | | | 22,700 | Apr 4 | 45,300 | Mar 19, 1936 |
| MAXIMUM PEAK STAGE | | | 14.63 | Apr 4 | 24.54 | Mar 19, 1936 |
| 10 PERCENT EXCEEDS | 3,600 | | 3,980 | | 4,000 | |
| 50 PERCENT EXCEEDS | 1,070 | | 960 | | 1,000 | |
| 90 PERCENT EXCEEDS | 546 | | 427 | | 358 | |

e Estimated



04292000 LAMOILLE RIVER AT JOHNSON, VT

LOCATION.--Lat 44° 37'22", long 72° 40'36", Lamoille County, Hydrologic Unit 02010005, on right bank, above falls, 0.8 mi south of State Highways 15 and 100° C intersection in Johnson, 0.8 mi upstream from Railroad Street bridge in Johnson, 0.9 mi upstream from Gihon River, and 1.0 mi downstream of Waterman Brook.

DRAINAGE AREA.--310 mi².

PERIOD OF RECORD.--Discharge records: July to December 1910, June 1911 to December 1913 (monthly discharge only, January to March 1912, February 1913), September 1928 to current year.

REVISED RECORDS.--WSP 894: Drainage area. WSP 1114: 1933, 1934(M). WSP 1237: 1912(M), 1930, 1932(M).

GAGE.--Water-stage recorder. Elevation of gage is 506.7 ft above National Geodetic Vertical Datum of 1929, by levels. Prior to December 31, 1913, nonrecording gage at bridge 0.7 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by power plant upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,400 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Apr 3 | 1945 | *7,750 | *12.96 | No other peak greater than base discharge. | | | |

Minimum discharge, 59 ft³/s, Aug. 20, gage height, 1.82 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|--------|--------|-------|--------|--------|--------|--------|-------|-------|-------|
| 1 | 133 | 252 | 1,220 | e700 | e280 | e198 | e2,650 | 1,760 | 736 | 209 | 138 | 2,330 |
| 2 | 133 | 252 | 2,170 | e725 | e270 | e220 | e3,090 | 1,240 | 505 | 162 | 241 | 738 |
| 3 | 136 | 525 | 1,080 | 659 | e265 | e240 | 6,270 | 1,020 | 393 | 141 | 251 | 406 |
| 4 | 161 | 443 | e700 | 639 | e260 | e250 | 4,880 | 880 | 339 | 123 | 190 | 305 |
| 5 | 166 | 525 | e620 | e530 | e255 | e220 | 2,610 | 750 | 298 | 117 | 142 | 195 |
| 6 | 141 | 554 | e460 | e485 | e245 | e195 | 2,550 | 652 | 255 | 152 | 137 | 168 |
| 7 | 153 | 607 | e520 | e405 | e240 | e220 | 3,330 | 588 | 243 | 181 | 116 | 240 |
| 8 | 142 | 522 | 665 | e375 | e240 | e250 | 4,250 | 564 | 211 | 141 | 110 | 228 |
| 9 | 132 | 425 | 780 | e367 | e270 | e400 | 2,670 | 537 | 195 | 555 | 106 | 170 |
| 10 | 132 | 331 | 561 | e370 | e690 | e390 | 2,060 | 498 | 183 | 1,520 | 104 | 92 |
| 11 | 139 | 289 | 690 | e365 | e585 | e360 | 1,830 | 455 | 216 | 602 | 71 | 64 |
| 12 | 145 | 278 | 835 | e340 | e510 | e325 | 1,330 | 486 | 213 | 340 | 62 | 64 |
| 13 | 183 | 273 | 629 | e330 | e420 | e280 | 1,090 | 432 | 193 | 239 | 62 | 73 |
| 14 | 201 | 239 | e497 | e1,150 | e340 | e300 | 887 | 376 | 195 | 180 | 69 | 97 |
| 15 | 219 | 218 | e430 | e1,020 | e375 | e320 | 927 | 396 | 550 | 224 | 172 | 94 |
| 16 | 321 | 195 | e450 | e780 | e420 | e305 | 891 | 518 | 578 | 191 | 118 | 201 |
| 17 | 383 | 138 | e475 | e570 | e470 | e268 | 968 | 552 | 768 | 459 | 108 | 367 |
| 18 | 273 | 207 | e450 | e490 | e375 | e320 | 1,070 | 428 | 1,440 | 349 | 102 | 483 |
| 19 | 262 | 227 | e435 | e460 | e295 | e250 | 966 | 412 | 1,040 | 220 | 86 | 430 |
| 20 | 244 | 230 | e400 | e430 | e280 | e248 | 1,040 | 341 | 597 | 193 | 61 | 273 |
| 21 | 219 | 285 | e380 | e400 | e250 | e255 | 1,640 | 342 | 441 | 147 | 65 | 204 |
| 22 | 201 | 375 | e360 | e360 | e230 | e260 | 1,020 | 482 | 345 | 134 | 326 | 184 |
| 23 | 186 | 334 | e430 | e340 | e200 | e268 | 1,520 | 660 | 318 | 138 | 171 | 152 |
| 24 | 173 | 270 | 3,140 | e340 | e195 | e275 | 2,890 | 695 | 299 | 123 | 130 | 132 |
| 25 | 166 | 858 | 1,240 | e330 | e195 | e283 | 2,390 | 517 | 295 | 111 | 132 | 119 |
| 26 | 161 | 1,490 | e650 | e305 | e190 | e295 | 1,560 | 421 | 192 | 109 | 109 | 147 |
| 27 | 160 | 807 | e480 | e300 | e180 | e305 | 1,230 | 466 | 116 | 162 | 108 | 464 |
| 28 | 156 | 659 | e400 | e295 | e195 | e455 | 2,420 | 455 | 111 | 444 | 108 | 406 |
| 29 | 151 | 1,300 | e405 | e290 | --- | e640 | 2,170 | 410 | 159 | 288 | 102 | 267 |
| 30 | 162 | 882 | e390 | e285 | --- | e950 | 1,430 | 437 | 204 | 192 | 63 | 286 |
| 31 | 188 | --- | e400 | e280 | --- | e1,200 | --- | 774 | --- | 144 | 834 | --- |
| TOTAL | 5,722 | 13,990 | 22,342 | 14,715 | 8,720 | 10,745 | 63,629 | 18,544 | 11,628 | 8,290 | 4,594 | 9,379 |
| MEAN | 185 | 466 | 721 | 475 | 311 | 347 | 2,121 | 598 | 388 | 267 | 148 | 313 |
| MAX | 383 | 1,490 | 3,140 | 1,150 | 690 | 1,200 | 6,270 | 1,760 | 1,440 | 1,520 | 834 | 2,330 |
| MIN | 132 | 138 | 360 | 280 | 180 | 195 | 887 | 341 | 111 | 109 | 61 | 64 |
| CFSM | 0.60 | 1.50 | 2.32 | 1.53 | 1.00 | 1.12 | 6.84 | 1.93 | 1.25 | 0.86 | 0.48 | 1.01 |
| IN. | 0.69 | 1.68 | 2.68 | 1.77 | 1.05 | 1.29 | 7.64 | 2.23 | 1.40 | 0.99 | 0.55 | 1.13 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910-14, 1928 - 2005, BY WATER YEAR (WY)

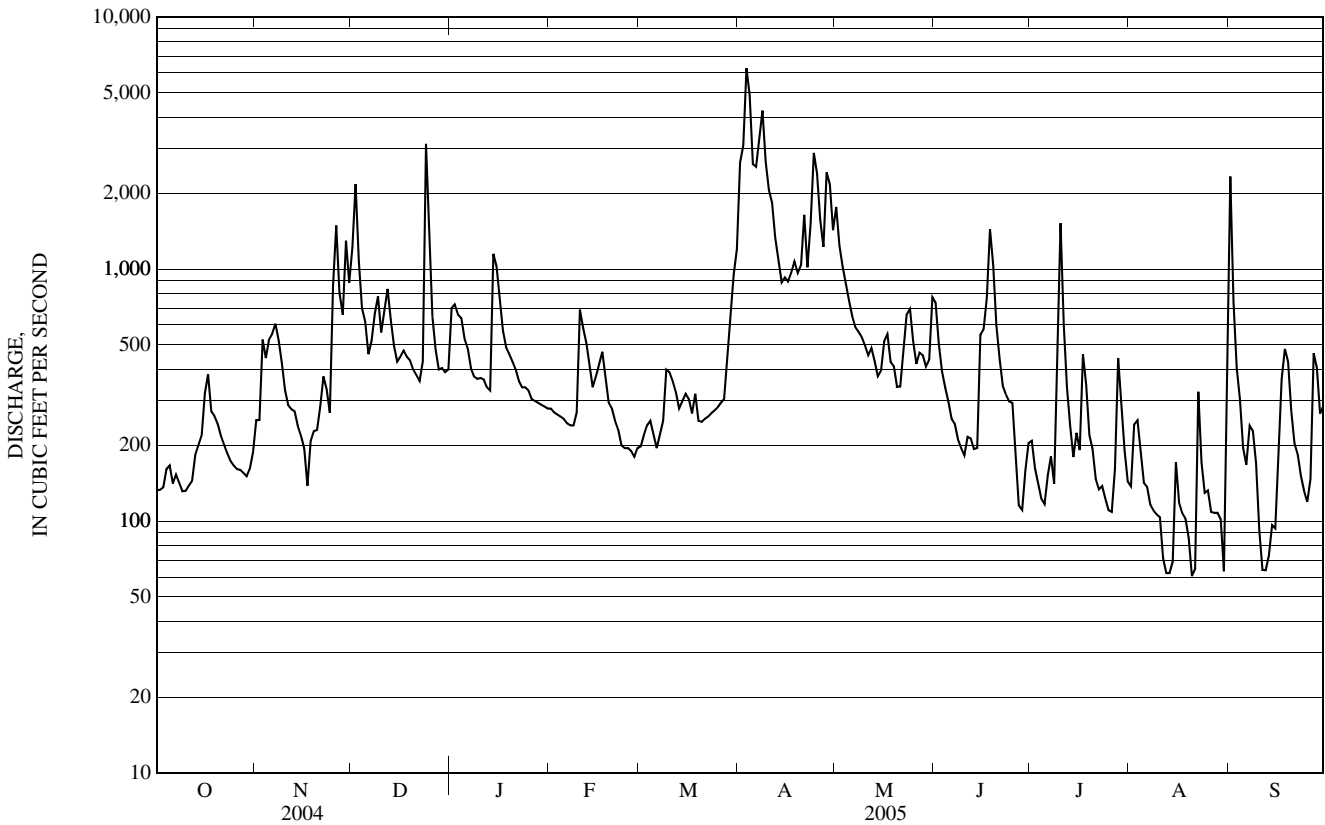
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 397 | 518 | 467 | 377 | 336 | 721 | 1,636 | 797 | 420 | 277 | 255 | 257 |
| MAX | 1,481 | 1,263 | 1,390 | 959 | 1,624 | 2,711 | 2,868 | 1,903 | 1,344 | 1,028 | 849 | 655 |
| (WY) | (1991) | (2004) | (1991) | (1996) | (1981) | (1936) | (1933) | (1972) | (1973) | (1973) | (2004) | (1938) |
| MIN | 84.1 | 140 | 162 | 93.0 | 114 | 157 | 556 | 245 | 123 | 88.5 | 59.1 | 93.6 |
| (WY) | (1964) | (1954) | (1948) | (1948) | (1934) | (1940) | (1995) | (1965) | (1988) | (1911) | (2001) | (1978) |

ST. LAWRENCE RIVER BASIN

04292000 LAMOILLE RIVER AT JOHNSON, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1910-14, 1928-2005 | |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------|--------------|
| ANNUAL TOTAL | 222,281 | | 192,298 | | | |
| ANNUAL MEAN | 607 | | 527 | | 540 | |
| HIGHEST ANNUAL MEAN | | | | | 819 | 1973 |
| LOWEST ANNUAL MEAN | | | | | 305 | 1965 |
| HIGHEST DAILY MEAN | 4,020 | Mar 27 | 6,270 | Apr 3 | 13,400 | Aug 6, 1995 |
| LOWEST DAILY MEAN | 132 | Oct 9 | 61 | Aug 20 | 16 | Oct 26, 1947 |
| ANNUAL SEVEN-DAY MINIMUM | 141 | Oct 6 | 83 | Aug 8 | 44 | Aug 11, 2001 |
| MAXIMUM PEAK FLOW | | | 7,750 | Apr 3 | 19,000 | Aug 6, 1995 |
| MAXIMUM PEAK STAGE | | | 12.96 | Apr 3 | 19.98 | Aug 6, 1995 |
| INSTANTANEOUS LOW FLOW | | | 59 | Aug 20 | 11 | Sep 2, 1935 |
| ANNUAL RUNOFF (CFSM) | 1.96 | | 1.70 | | 1.74 | |
| ANNUAL RUNOFF (INCHES) | 26.67 | | 23.08 | | 23.66 | |
| 10 PERCENT EXCEEDS | 1,170 | | 1,070 | | 1,180 | |
| 50 PERCENT EXCEEDS | 400 | | 320 | | 298 | |
| 90 PERCENT EXCEEDS | 188 | | 132 | | 134 | |

e Estimated



04292500 LAMOILLE RIVER AT EAST GEORGIA, VT

LOCATION.--Lat 44° 40'45", long 73° 04'23", Franklin County, Hydrologic Unit 02010005, on right bank, 0.5 mi upstream from New England Central Railroad bridge at East Georgia, 0.9 mi downstream from Beaver Meadow Brook and 3.3 mi northeast of Main Street and US 7 intersection in Milton.

DRAINAGE AREA.--686 mi².

PERIOD OF RECORD.--Discharge records: August 1929 to current year. Prior to October 1937, published as "near Milton."

REVISED RECORDS.--WSP 894: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 285 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to December 1, 1937, at site 3.5 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Low flow regulated by power plants upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,400 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|-------|------|-----------------------------------|---------------------|
| Apr 1 | 0100 | ice jam | *14.40 | Apr 4 | 0545 | * 15,300 | 10.40 |

Minimum daily discharge, 156 ft³/s, Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|-------|--------|
| 1 | 423 | 521 | 2,150 | e1,550 | e615 | e435 | e5,900 | 3,480 | 1,130 | 526 | 329 | 3,870 |
| 2 | 410 | 551 | 5,060 | e1,700 | e600 | e500 | e7,000 | 2,850 | 944 | 423 | 455 | 1,700 |
| 3 | 405 | 990 | 2,750 | e1,460 | e590 | e570 | 11,300 | 2,170 | 778 | 371 | 524 | 851 |
| 4 | 387 | 1,040 | e1,600 | e1,320 | e575 | e640 | 14,100 | 1,800 | 659 | 325 | 431 | 594 |
| 5 | 413 | 875 | e1,220 | e1,170 | e565 | e510 | 7,290 | 1,510 | 600 | 349 | 381 | 507 |
| 6 | 396 | 1,000 | e940 | e1,030 | e560 | e425 | 5,020 | 1,280 | 535 | 435 | 381 | 353 |
| 7 | 374 | 1,150 | e960 | e820 | e550 | e495 | 5,690 | 1,170 | 497 | 423 | 325 | 510 |
| 8 | 380 | 1,090 | e1,260 | e840 | e540 | e550 | 8,370 | 1,100 | 467 | 385 | 280 | 424 |
| 9 | 400 | 951 | 1,490 | e820 | e620 | e710 | 6,390 | 1,060 | 437 | 618 | 260 | 346 |
| 10 | 349 | 735 | 1,250 | e790 | e1,650 | e950 | 4,210 | 1,000 | 419 | 3,740 | 247 | 320 |
| 11 | 327 | 670 | 2,080 | e770 | e1,500 | e890 | 3,590 | 961 | 429 | 1,550 | 251 | 232 |
| 12 | 340 | 633 | 2,180 | e750 | e1,150 | e720 | 2,740 | 994 | 442 | 863 | 214 | 156 |
| 13 | 379 | 587 | 1,570 | e730 | e980 | e605 | 2,200 | 946 | 430 | 620 | 192 | 183 |
| 14 | 405 | 538 | e1,250 | e2,800 | e740 | e660 | 1,790 | 831 | 423 | 505 | 194 | 207 |
| 15 | 394 | 535 | e1,120 | e2,280 | e820 | e710 | 1,730 | 819 | 726 | 502 | 216 | 219 |
| 16 | 511 | 529 | e1,180 | e1,950 | e940 | e650 | 1,640 | 957 | 1,070 | 507 | 313 | 247 |
| 17 | 819 | 487 | e1,050 | e1,600 | e1,150 | e590 | 1,700 | 1,010 | 2,090 | 575 | 254 | 414 |
| 18 | 707 | 458 | e1,000 | e1,250 | e940 | e730 | 1,970 | 912 | 2,850 | 733 | 232 | 1,080 |
| 19 | 581 | 526 | e950 | e1,020 | e820 | e560 | 1,850 | 802 | 2,350 | 536 | 220 | 883 |
| 20 | 478 | 554 | e890 | e980 | e690 | e540 | 1,940 | 709 | 1,260 | 447 | 204 | 647 |
| 21 | 430 | 619 | e840 | e920 | e610 | e550 | 3,210 | 679 | 930 | 410 | 176 | 482 |
| 22 | 462 | 788 | e790 | e870 | e520 | e570 | 2,290 | 783 | 873 | 339 | 217 | 412 |
| 23 | 432 | 740 | e1,070 | e830 | e460 | e580 | 2,520 | 1,140 | 766 | 327 | 437 | 397 |
| 24 | 408 | 652 | e7,000 | e780 | e430 | e590 | 4,930 | 1,320 | 624 | 320 | 288 | 374 |
| 25 | 395 | 1,050 | e2,750 | e740 | e415 | e605 | 5,000 | 1,100 | 577 | 278 | 264 | 327 |
| 26 | 387 | 3,130 | e1,450 | e700 | e405 | e650 | 3,470 | 900 | 530 | 266 | 257 | 347 |
| 27 | 371 | 1,740 | e1,060 | e660 | e400 | e685 | 2,420 | 878 | 388 | 366 | 228 | 1,310 |
| 28 | 370 | 1,260 | e880 | e650 | e415 | e1,010 | 4,120 | 930 | 328 | 857 | 222 | 1,090 |
| 29 | 358 | 2,440 | e870 | e640 | --- | e1,510 | 5,100 | 871 | 340 | 688 | 226 | 787 |
| 30 | 360 | 1,890 | e860 | e630 | --- | e2,200 | 3,690 | 780 | 614 | 474 | 242 | 854 |
| 31 | 424 | --- | e870 | e625 | --- | e3,300 | --- | 907 | --- | 387 | 761 | --- |
| TOTAL | 13,275 | 28,729 | 50,390 | 33,675 | 20,250 | 24,690 | 133,170 | 36,649 | 24,506 | 19,145 | 9,221 | 20,123 |
| MEAN | 428 | 958 | 1,625 | 1,086 | 723 | 796 | 4,439 | 1,182 | 817 | 618 | 297 | 671 |
| MAX | 819 | 3,130 | 7,000 | 2,800 | 1,650 | 3,300 | 14,100 | 3,480 | 2,850 | 3,740 | 761 | 3,870 |
| MIN | 327 | 458 | 790 | 625 | 400 | 425 | 1,640 | 679 | 328 | 266 | 176 | 156 |
| CFSM | 0.62 | 1.40 | 2.37 | 1.58 | 1.05 | 1.16 | 6.47 | 1.72 | 1.19 | 0.90 | 0.43 | 0.98 |
| IN. | 0.72 | 1.56 | 2.73 | 1.83 | 1.10 | 1.34 | 7.22 | 1.99 | 1.33 | 1.04 | 0.50 | 1.09 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

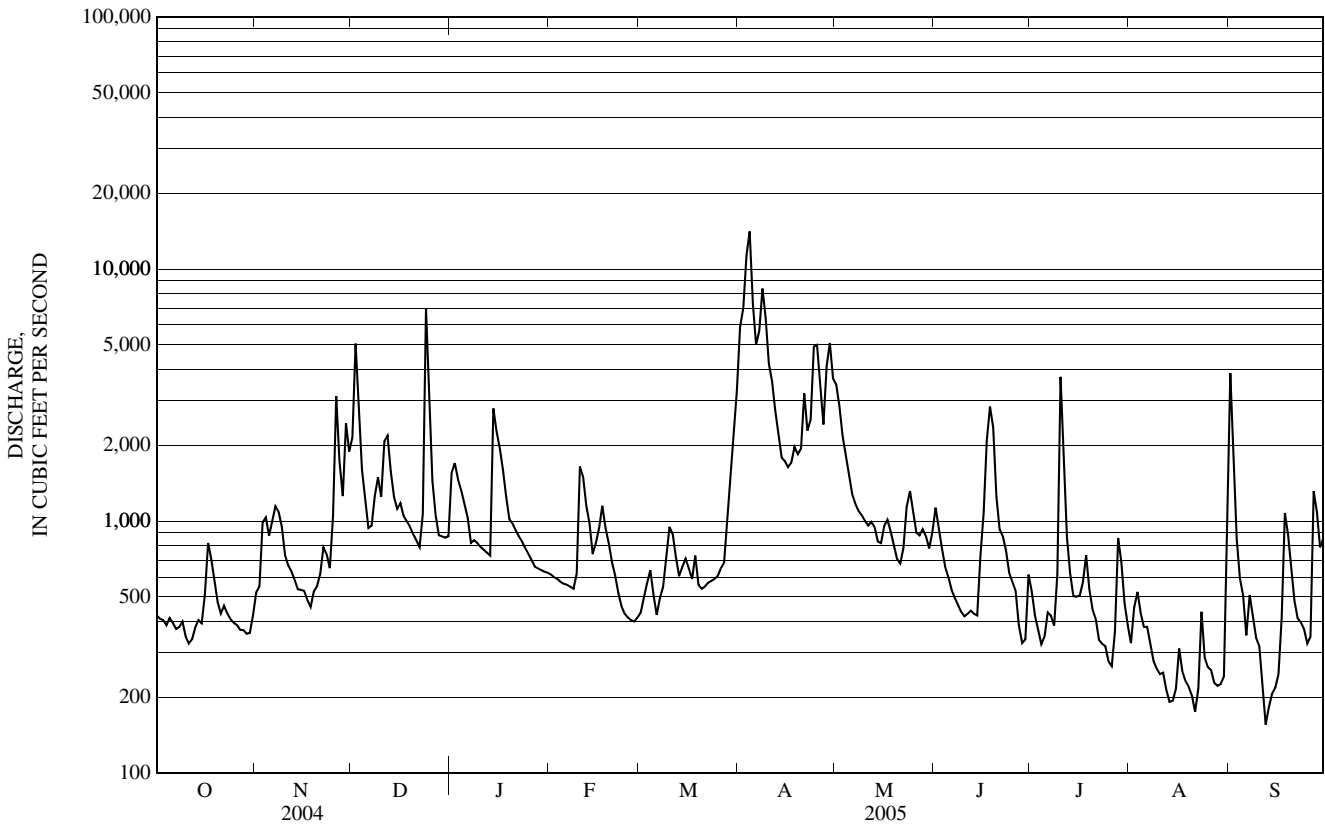
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 990 | 1,308 | 1,127 | 903 | 800 | 1,653 | 3,637 | 1,832 | 985 | 651 | 616 | 640 |
| MAX | 3,330 | 2,744 | 3,076 | 2,197 | 4,101 | 5,622 | 6,211 | 4,022 | 3,246 | 2,609 | 2,261 | 1,987 |
| (WY) | (1946) | (2004) | (1974) | (1998) | (1981) | (1936) | (1933) | (1940) | (2002) | (1998) | (2004) | (1938) |
| MIN | 237 | 306 | 405 | 224 | 293 | 399 | 1,253 | 638 | 293 | 223 | 171 | 218 |
| (WY) | (1954) | (1954) | (1948) | (1948) | (1962) | (1940) | (1995) | (1987) | (1988) | (1991) | (2001) | (1978) |

ST. LAWRENCE RIVER BASIN

04292500 LAMOILLE RIVER AT EAST GEORGIA, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1929 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 509,345 | | 413,823 | | 1,262 | |
| ANNUAL MEAN | 1,392 | | 1,134 | | 791 | |
| HIGHEST ANNUAL MEAN | | | | | 1,776 | 1976 |
| LOWEST ANNUAL MEAN | | | | | 791 | 1965 |
| HIGHEST DAILY MEAN | 13,000 | Aug 31 | 14,100 | Apr 4 | 21,700 | Mar 19, 1936 |
| LOWEST DAILY MEAN | 327 | Oct 11 | 156 | Sep 12 | 74 | Sep 26, 1964 |
| ANNUAL SEVEN-DAY MINIMUM | 364 | Oct 7 | 223 | Sep 10 | 122 | Aug 30, 1934 |
| MAXIMUM PEAK FLOW | | | 15,300 | Apr 4 | 23,700 | Apr 18, 1982 |
| MAXIMUM PEAK STAGE | | | a 14.40 | Apr 1 | a 21.64 | Mar 6, 1979 |
| ANNUAL RUNOFF (CFSM) | 2.03 | | 1.65 | | 1.84 | |
| ANNUAL RUNOFF (INCHES) | 27.62 | | 22.44 | | 24.99 | |
| 10 PERCENT EXCEEDS | 2,970 | | 2,280 | | 2,800 | |
| 50 PERCENT EXCEEDS | 878 | | 690 | | 720 | |
| 90 PERCENT EXCEEDS | 424 | | 327 | | 299 | |

a Ice jam.
e Estimated



04293000 MISSISQUOI RIVER NEAR NORTH TROY, VT

LOCATION.--Lat 44° 58'22", long 72° 23'09", Orleans County, Hydrologic Unit 02010007, on right bank, 200 ft upstream from Big Falls, 1.5 mi downstream from Jay Branch, 1.8 mi southeast of Town Hall in North Troy, 2.2 mi upstream from State Highway 105 bridge in North Troy, and 8.8 mi west of State Highway 105 and US 5 intersection in Newport.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--Discharge records: August 1931 to current year.

REVISED RECORDS.--WSP 924: 1940. WSP 1114: 1933(M), 1936-39.

GAGE.--Water-stage recorder. Elevation of gage is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional regulation at low flow caused by small power plant upstream; greater regulation prior to 1967.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s, June 12, 2002, gage height, 14.55 ft; minimum, 9.4 ft³/s, August 28, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,300 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|-------|------|-----------------------------------|---------------------|
| Apr 4 | 0100 | 3,340 | 7.76 | Apr 8 | 0730 | *3,640 | *8.02 |

Minimum discharge, 26 ft³/s, Aug. 28, gage height, 1.17 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1 | 65 | 147 | 692 | e320 | e76 | e69 | e1,540 | 1,110 | 529 | 78 | 62 | 752 |
| 2 | 63 | 139 | 1,320 | e392 | e77 | e68 | e1,390 | 622 | 279 | 96 | 54 | 164 |
| 3 | 77 | 318 | e484 | e274 | e74 | e68 | e2,540 | 479 | 201 | 75 | 57 | 96 |
| 4 | 73 | 207 | e285 | e255 | e72 | e66 | 2,380 | 406 | 157 | 62 | 51 | 73 |
| 5 | 67 | 289 | e200 | e200 | e80 | e66 | 1,440 | 316 | 128 | 79 | 50 | 60 |
| 6 | 64 | 566 | e153 | e179 | e73 | e65 | 1,440 | 273 | 113 | 155 | 55 | 50 |
| 7 | 63 | 776 | e212 | e178 | e78 | e67 | 2,110 | 245 | 102 | 86 | 44 | 43 |
| 8 | 61 | 536 | 377 | e146 | e93 | e93 | 2,940 | 227 | 94 | 67 | 39 | 41 |
| 9 | 60 | 288 | 385 | e161 | e193 | e99 | 1,420 | 215 | 91 | 355 | 36 | 50 |
| 10 | 58 | 196 | 264 | e172 | e199 | e87 | 1,170 | 211 | 126 | 586 | 35 | 46 |
| 11 | 59 | 176 | 278 | e155 | e153 | e84 | 1,050 | 205 | 299 | 181 | 36 | 38 |
| 12 | 61 | 169 | 285 | e144 | e146 | e82 | 685 | 204 | 131 | 104 | 36 | 35 |
| 13 | 59 | 127 | 247 | e168 | e117 | e80 | 556 | 165 | 111 | 86 | 35 | 33 |
| 14 | 58 | 109 | e187 | e1,000 | e100 | e86 | 581 | 152 | 378 | 126 | 34 | 32 |
| 15 | 58 | 130 | e143 | e489 | e122 | e88 | 529 | 181 | 873 | 237 | 42 | 30 |
| 16 | 119 | 122 | e155 | e334 | e145 | e85 | 568 | 214 | 489 | 116 | 41 | 31 |
| 17 | 157 | 122 | e148 | e200 | e165 | e81 | 758 | 201 | 787 | 115 | 36 | 117 |
| 18 | 184 | 128 | e135 | e165 | e126 | e84 | 896 | 162 | 1,990 | 101 | 32 | 256 |
| 19 | 137 | 183 | e142 | e127 | e109 | e83 | 746 | 152 | 690 | 108 | 30 | 119 |
| 20 | 104 | 167 | e127 | e120 | e95 | e84 | 995 | 140 | 315 | 113 | 29 | 79 |
| 21 | 92 | 204 | e110 | e121 | e92 | e86 | 1,180 | 128 | 208 | 75 | 32 | 63 |
| 22 | 86 | 253 | e138 | e110 | e94 | e90 | 556 | 333 | 282 | 66 | 35 | 52 |
| 23 | 80 | 192 | e307 | e102 | e93 | e108 | 1,120 | 370 | 194 | 84 | 37 | 64 |
| 24 | 76 | 161 | e1,950 | e108 | e86 | e105 | 1,490 | 501 | 141 | 65 | 36 | 60 |
| 25 | 75 | 718 | e525 | e101 | e82 | e113 | 1,060 | 286 | 112 | 55 | 34 | 48 |
| 26 | 71 | 938 | e285 | e93 | e80 | e108 | 698 | 232 | 97 | 50 | 31 | 89 |
| 27 | 70 | 340 | e253 | e90 | e77 | e110 | 515 | 410 | 87 | 188 | 28 | 506 |
| 28 | 67 | 348 | e237 | e85 | e72 | e219 | 1,140 | 450 | 78 | 272 | 27 | 177 |
| 29 | 66 | 936 | e253 | e81 | --- | e326 | 1,700 | 325 | 74 | 107 | 29 | 158 |
| 30 | 65 | 404 | e228 | e81 | --- | e485 | 955 | 528 | 90 | 74 | 29 | 231 |
| 31 | 123 | --- | e260 | e83 | --- | e650 | --- | 802 | --- | 59 | 408 | --- |
| TOTAL | 2,518 | 9,389 | 10,765 | 6,234 | 2,969 | 3,985 | 36,148 | 10,245 | 9,246 | 4,021 | 1,560 | 3,593 |
| MEAN | 81.2 | 313 | 347 | 201 | 106 | 129 | 1,205 | 330 | 308 | 130 | 50.3 | 120 |
| MAX | 184 | 938 | 1,950 | 1,000 | 199 | 650 | 2,940 | 1,110 | 1,990 | 586 | 408 | 752 |
| MIN | 58 | 109 | 110 | 81 | 72 | 65 | 515 | 128 | 74 | 50 | 27 | 30 |
| CFSM | 0.62 | 2.39 | 2.65 | 1.54 | 0.81 | 0.98 | 9.20 | 2.52 | 2.35 | 0.99 | 0.38 | 0.91 |
| IN. | 0.72 | 2.67 | 3.06 | 1.77 | 0.84 | 1.13 | 10.26 | 2.91 | 2.63 | 1.14 | 0.44 | 1.02 |

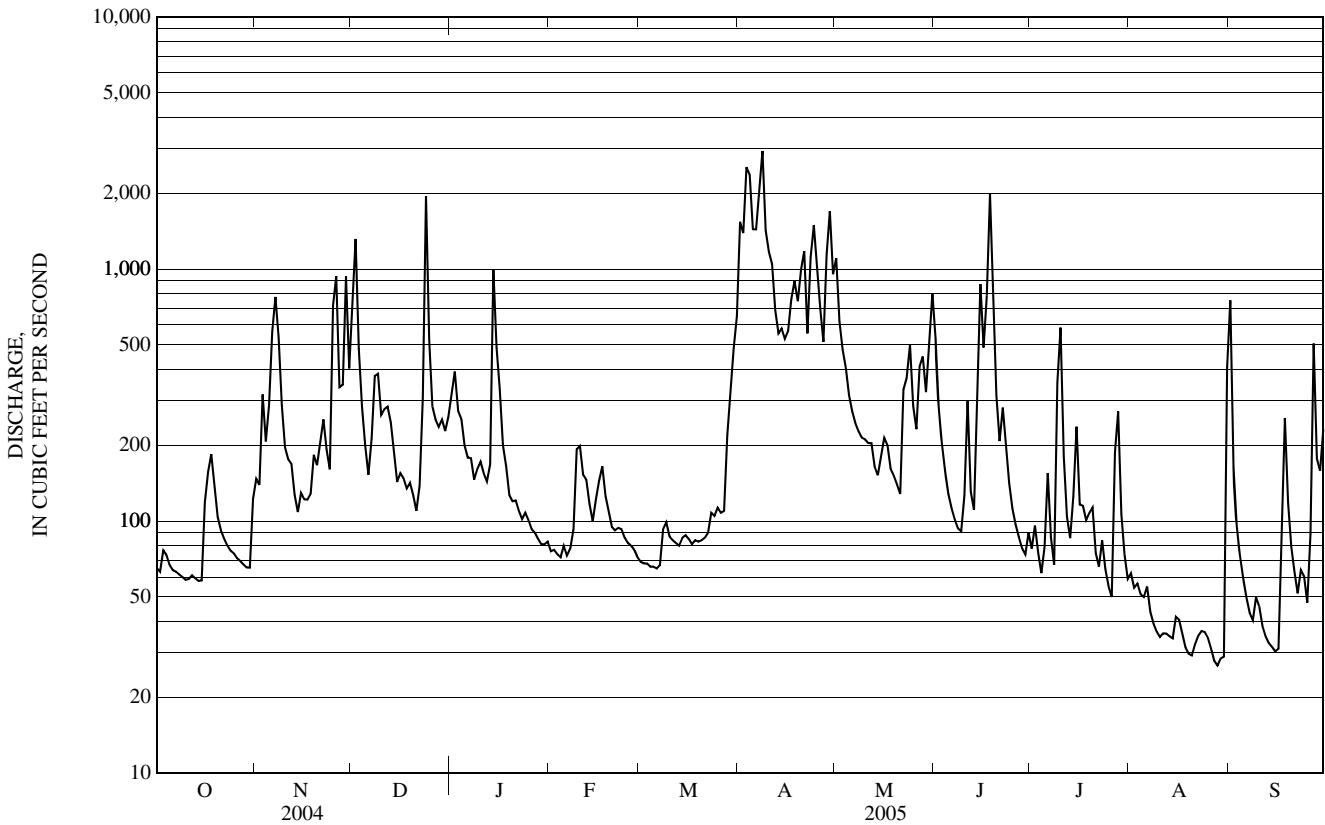
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 221 | 290 | 231 | 167 | 139 | 375 | 881 | 415 | 198 | 121 | 115 | 134 |
| MAX | 653 | 662 | 585 | 661 | 796 | 1,225 | 1,522 | 991 | 932 | 412 | 454 | 421 |
| (WY) | (1946) | (2004) | (1974) | (1998) | (1981) | (1936) | (1933) | (1940) | (2002) | (1997) | (1976) | (1945) |
| MIN | 51.3 | 97.6 | 60.9 | 53.9 | 34.0 | 57.0 | 265 | 143 | 43.7 | 32.0 | 19.7 | 31.5 |
| (WY) | (1949) | (1979) | (1956) | (1940) | (1980) | (1941) | (1995) | (1977) | (1933) | (1934) | (1934) | (1953) |

04293000 MISSISQUOI RIVER NEAR NORTH TROY, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1931 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 112,106 | | 100,673 | | | |
| ANNUAL MEAN | 306 | | 276 | | 274 | |
| HIGHEST ANNUAL MEAN | | | | | 391 | 2004 |
| LOWEST ANNUAL MEAN | | | | | 168 | 1965 |
| HIGHEST DAILY MEAN | 3,920 | Aug 31 | 2,940 | Apr 8 | 8,330 | Jun 12, 2002 |
| LOWEST DAILY MEAN | 49 | Jul 5 | 27 | Aug 28 | 11 | Aug 28, 1949 |
| ANNUAL SEVEN-DAY MINIMUM | 59 | Oct 9 | 31 | Aug 24 | 15 | Aug 22, 1934 |
| MAXIMUM PEAK FLOW | | | 3,640 | Apr 8 | 11,500 | Jun 12, 2002 |
| MAXIMUM PEAK STAGE | | | 8.02 | Apr 8 | 14.55 | Jun 12, 2002 |
| INSTANTANEOUS LOW FLOW | | | 26 | Aug 28 | 9.4 | Aug 28, 1949 |
| ANNUAL RUNOFF (CF5M) | 2.34 | | 2.11 | | 2.09 | |
| ANNUAL RUNOFF (INCHES) | 31.83 | | 28.59 | | 28.39 | |
| 10 PERCENT EXCEEDS | 690 | | 694 | | 635 | |
| 50 PERCENT EXCEEDS | 168 | | 127 | | 128 | |
| 90 PERCENT EXCEEDS | 73 | | 50 | | 46 | |

e Estimated



04293500 MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT

LOCATION.--Lat 44° 57'36", long 72° 41'49", Franklin County, Hydrologic Unit 02010007, on left bank, 0.4 mi upstream of State Highway 105 bridge, 1.9 mi north of intersection of State Highways 105 and 118 in East Berkshire, 1.9 mi upstream from Trout River, 2.6 mi southwest of Town Hall in Richford, and 3.6 mi downstream from North Branch.

DRAINAGE AREA.--479 mi².

PERIOD OF RECORD.--Discharge records: July 1911 to September 1923, October 1928 to current year. Monthly discharge only for July 1911 to July 1915, September 1916, March 1920 to July 1920, March 1921 to July 1921, published in WSP 1307. Prior to October 1977, published as "near Richford."

REVISED RECORDS.--WSP 784: Drainage area. WSP 1237: 1913-14(M), 1922(M), 1923, 1929-30. WSP 1307: 1916(M). WSP 1437: 1912.

GAGE.--Water-stage recorder. Elevation of gage is 410 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to August 1, 1915, nonrecording gage at site 0.2 mi downstream at datum 4.35 ft lower. August 1, 1915 to September 30, 1923, water-stage recorder at present site and datum. October 1, 1928 to September 30, 1929, nonrecording gage at former site at datum 4.6 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow prior to 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 45,000 ft³/s during flood of November 1927, gage height, 23.1 ft, from floodmarks, from rating curve extended above 14,100 ft³/s on basis of computation of peak flow over dam at gage height 14.70 ft, slope-area measurement at gage height 12.90 ft, and study of discharge per foot of width at measuring section.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,600 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|-------|------|-----------------------------------|---------------------|
| Apr 3 | 1630 | *10,000 | *11.32 | Apr 8 | 0200 | 8,000 | 10.00 |

Minimum discharge, 72 ft³/s, Aug. 28, 29, 30, 31, gage height, 1.86 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|--------|--------|--------|--------|---------|--------|--------|--------|-------|--------|
| 1 | 211 | 389 | 1,890 | e1,270 | e355 | e288 | e4,530 | 4,190 | 1,820 | 254 | 267 | 1,630 |
| 2 | 203 | 411 | 3,730 | e1,520 | e335 | e283 | e4,920 | 3,070 | 1,170 | 237 | 240 | 938 |
| 3 | 280 | 721 | 2,470 | e1,220 | e325 | e278 | e6,970 | 2,090 | 830 | 256 | 210 | 506 |
| 4 | 258 | 747 | e1,300 | e1,070 | e315 | e275 | 8,830 | 1,610 | 635 | 224 | 195 | 316 |
| 5 | 245 | 811 | e1,010 | e850 | e305 | e270 | 7,290 | 1,290 | 497 | 265 | 203 | 236 |
| 6 | 220 | 1,390 | e650 | e745 | e315 | e270 | 5,720 | 1,070 | 418 | 499 | 179 | 199 |
| 7 | 205 | 2,290 | e760 | e690 | e315 | e275 | 5,800 | 932 | 362 | 392 | 163 | 172 |
| 8 | 198 | 1,780 | e1,240 | e640 | e330 | e350 | 7,120 | 834 | 315 | 263 | 145 | 147 |
| 9 | 192 | 1,200 | e1,450 | e620 | e390 | e370 | 6,230 | 772 | 290 | 711 | 128 | 138 |
| 10 | 187 | 842 | e1,170 | e605 | e560 | e345 | 4,370 | 723 | 271 | 2,310 | 119 | 132 |
| 11 | 184 | 721 | e1,150 | e595 | e510 | e330 | 3,470 | 675 | 349 | 1,110 | 143 | 122 |
| 12 | 181 | 686 | e1,220 | e587 | e460 | e315 | 2,630 | 631 | 421 | 607 | 121 | 107 |
| 13 | 180 | 575 | e980 | e752 | e415 | e300 | 1,960 | 567 | 354 | 405 | 114 | 99 |
| 14 | 175 | 477 | e750 | e2,360 | e375 | e290 | 1,750 | 511 | 1,510 | 326 | 115 | 89 |
| 15 | 177 | 482 | e580 | e2,280 | e405 | e285 | 1,630 | 538 | 4,040 | 710 | 122 | 82 |
| 16 | 303 | 449 | e560 | e1,220 | e450 | e280 | 1,530 | 634 | 3,030 | 734 | 117 | 80 |
| 17 | 466 | 440 | e580 | e895 | e490 | e270 | 1,670 | 659 | 3,100 | 419 | 111 | 246 |
| 18 | 520 | 435 | e520 | e708 | e435 | e255 | 1,990 | 569 | 5,490 | 508 | 100 | 916 |
| 19 | 481 | 497 | e505 | e565 | e410 | e270 | 1,790 | 512 | 4,720 | 469 | 91 | 922 |
| 20 | 373 | 550 | e490 | e515 | e385 | e270 | 1,930 | 468 | 2,300 | 637 | 84 | 630 |
| 21 | 305 | 589 | e445 | e510 | e355 | e290 | 2,890 | 432 | 1,190 | 443 | 85 | 449 |
| 22 | 269 | 696 | e520 | e482 | e350 | e315 | 2,060 | 586 | 887 | 321 | 89 | 357 |
| 23 | 251 | 660 | e1,140 | e467 | e355 | e355 | 2,220 | 957 | 820 | 425 | 89 | 284 |
| 24 | 236 | 578 | e4,480 | e469 | e345 | e385 | 3,870 | 1,110 | 616 | 356 | 88 | 271 |
| 25 | 228 | 1,470 | e3,440 | e458 | e340 | e375 | 3,460 | 910 | 490 | 268 | 86 | 232 |
| 26 | 221 | 2,900 | e1,890 | e441 | e325 | e390 | 2,700 | 662 | 396 | 238 | 81 | 267 |
| 27 | 212 | 1,620 | e1,260 | e425 | e315 | e415 | 1,910 | 873 | 336 | 925 | 75 | 739 |
| 28 | 223 | 1,180 | e990 | e408 | e295 | e778 | 2,530 | 1,270 | 289 | 1,190 | 73 | 794 |
| 29 | 231 | 2,330 | e940 | e390 | --- | e1,180 | 6,010 | 1,120 | 263 | 673 | 72 | 512 |
| 30 | 220 | 1,760 | e900 | e380 | --- | e1,760 | 4,760 | 1,250 | 255 | 409 | 72 | 688 |
| 31 | 271 | --- | e980 | e380 | --- | e2,670 | --- | 1,670 | --- | 297 | 404 | --- |
| TOTAL | 7,906 | 29,676 | 39,990 | 24,517 | 10,560 | 14,782 | 114,540 | 33,185 | 37,464 | 16,881 | 4,181 | 12,300 |
| MEAN | 255 | 989 | 1,290 | 791 | 377 | 477 | 3,818 | 1,070 | 1,249 | 545 | 135 | 410 |
| MAX | 520 | 2,900 | 4,480 | 2,360 | 560 | 2,670 | 8,830 | 4,190 | 5,490 | 2,310 | 404 | 1,630 |
| MIN | 175 | 389 | 445 | 380 | 295 | 255 | 1,530 | 432 | 255 | 224 | 72 | 80 |
| CFSM | 0.53 | 2.07 | 2.69 | 1.65 | 0.79 | 1.00 | 7.97 | 2.23 | 2.61 | 1.14 | 0.28 | 0.86 |
| IN. | 0.61 | 2.30 | 3.11 | 1.90 | 0.82 | 1.15 | 8.90 | 2.58 | 2.91 | 1.31 | 0.32 | 0.96 |

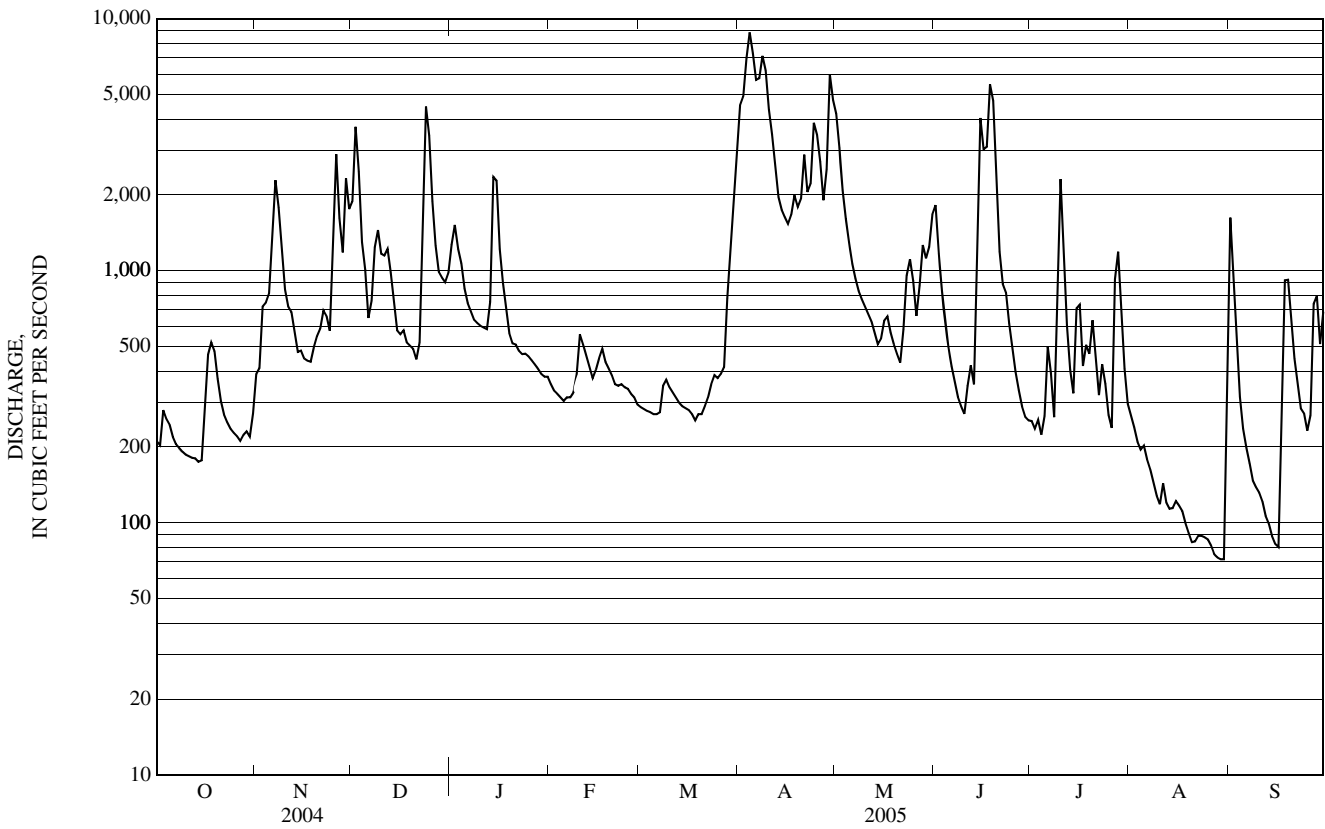
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-23, 1929-2005 BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 772 | 1,038 | 861 | 652 | 514 | 1,365 | 2,977 | 1,304 | 697 | 417 | 363 | 418 |
| MAX | 2,295 | 2,385 | 2,330 | 2,284 | 2,439 | 4,013 | 4,882 | 3,187 | 2,509 | 1,671 | 1,631 | 1,365 |
| (WY) | (1978) | (1984) | (1984) | (1998) | (1981) | (1936) | (1969) | (1940) | (2002) | (1974) | (2004) | (1954) |
| MIN | 87.4 | 241 | 270 | 157 | 115 | 240 | 922 | 453 | 175 | 86.0 | 63.3 | 57.5 |
| (WY) | (1949) | (1954) | (1956) | (1918) | (1980) | (1941) | (1995) | (1977) | (1999) | (1991) | (1934) | (1921) |

04293500 MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1915-23, 1929-2005 | |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------|--------------|
| ANNUAL TOTAL | 423,579 | | 345,982 | | 947 | |
| ANNUAL MEAN | 1,157 | | 948 | | 580 | |
| HIGHEST ANNUAL MEAN | | | | | 1,439 | 2004 |
| LOWEST ANNUAL MEAN | | | | | 580 | 1965 |
| HIGHEST DAILY MEAN | 8,200 | Mar 27 | 8,830 | Apr 4 | 18,200 | Mar 31, 1998 |
| LOWEST DAILY MEAN | 175 | Oct 14 | a 72 | Aug 29 | 28 | Aug 20, 1919 |
| ANNUAL SEVEN-DAY MINIMUM | 182 | Oct 9 | 78 | Aug 24 | 39 | Aug 22, 1934 |
| MAXIMUM PEAK FLOW | | | 10,000 | Apr 3 | 21,200 | Apr 18, 1982 |
| MAXIMUM PEAK STAGE | | | 11.32 | Apr 3 | b 18.92 | Mar 15, 1946 |
| INSTANTANEOUS LOW FLOW | | | c 72 | Aug 28 | 8.0 | Jul 14, 1911 |
| ANNUAL RUNOFF (CFSM) | 2.42 | | 1.98 | | 1.98 | |
| ANNUAL RUNOFF (INCHES) | 32.90 | | 26.87 | | 26.86 | |
| 10 PERCENT EXCEEDS | 2,680 | | 2,290 | | 2,250 | |
| 50 PERCENT EXCEEDS | 686 | | 481 | | 470 | |
| 90 PERCENT EXCEEDS | 268 | | 178 | | 146 | |

- a Also occurred on Aug. 30.
- b Ice jam.
- c Also occurred on Aug. 29-31.
- e Estimated.



04294000 MISSISQUOI RIVER AT SWANTON, VT

LOCATION.--Lat 44° 55'00", long 73° 07'44", Franklin County, Hydrologic Unit 02010007, on left bank, at Old Railroad abutment, 0.3 mi upstream of dam and Depot Street (Route 78) bridge, 0.3 mi southwest of Post Office in Swanton, 1.1 mi west of Highway 78 and Interstate 89 interchange, and 7.9 mi upstream of mouth.

DRAINAGE AREA.--850 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 105 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 6, 1989 to February 28, 1990, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Low flows regulated by power plants upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|-------|------|-----------------------------------|---------------------|
| Dec 24 | 0745 | e15,800 | e5.60 | Apr 8 | 0930 | 12,800 | 4.97 |
| Apr 4 | 0130 | *17,400 | *5.93 | | | | |

Minimum daily discharge, 103 ft³/s, Aug. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|-------|--------|
| 1 | 326 | 448 | 2,960 | e1,800 | e430 | 391 | e9,950 | 7,050 | 2,120 | 406 | 344 | 2,410 |
| 2 | 299 | 594 | 7,460 | e2,500 | e420 | 370 | e11,200 | 5,160 | 1,690 | 385 | 288 | 1,630 |
| 3 | 311 | 1,100 | 4,840 | e1,950 | e410 | 354 | 15,900 | 3,440 | 975 | 244 | 285 | 619 |
| 4 | 354 | 1,070 | e2,500 | e1,400 | e390 | 358 | 15,200 | 2,590 | 631 | 234 | 260 | 443 |
| 5 | 372 | 1,210 | e1,840 | e1,190 | e385 | 400 | 11,800 | 2,050 | 589 | 348 | 251 | 329 |
| 6 | 352 | 1,450 | e1,140 | e1,020 | e355 | 391 | 8,930 | 1,680 | 495 | 642 | 226 | 253 |
| 7 | 299 | 2,690 | e1,000 | e980 | e350 | 371 | 8,480 | 1,380 | 392 | 521 | 226 | 261 |
| 8 | 447 | 2,620 | e2,050 | e830 | 397 | 387 | 11,000 | 1,230 | 410 | 441 | 178 | 229 |
| 9 | 247 | 1,820 | e2,350 | e900 | 489 | 471 | 9,280 | 1,220 | 276 | 711 | 183 | 189 |
| 10 | 189 | 1,230 | e1,850 | e1,050 | 699 | 526 | 6,830 | 1,050 | 281 | 4,920 | 179 | 141 |
| 11 | 258 | 847 | e2,600 | e960 | 610 | 558 | 5,070 | 965 | 425 | 2,310 | 148 | 188 |
| 12 | 268 | 1,080 | e2,800 | e730 | 555 | 521 | 3,890 | 928 | 458 | 1,180 | 159 | 157 |
| 13 | 253 | 588 | e2,200 | e1,340 | 498 | 467 | 2,900 | 827 | 435 | 613 | 162 | 152 |
| 14 | 260 | 497 | e1,450 | e4,180 | 446 | 404 | 2,440 | 621 | 506 | 575 | 146 | 147 |
| 15 | 254 | 619 | e1,050 | e3,600 | 469 | 370 | 2,230 | 738 | 4,780 | 372 | 146 | 136 |
| 16 | 326 | 521 | e880 | e2,600 | 520 | 349 | 1,990 | 930 | 4,650 | 910 | 161 | 133 |
| 17 | 657 | 589 | e970 | e2,010 | 607 | 348 | 2,150 | 921 | 4,960 | 483 | 157 | 354 |
| 18 | 708 | 761 | e820 | e1,070 | 561 | 298 | 2,660 | 790 | 7,880 | 527 | 163 | 749 |
| 19 | 674 | 506 | e840 | e825 | 507 | 327 | 2,480 | 719 | 6,740 | 460 | 138 | 1,320 |
| 20 | 533 | 676 | e720 | e760 | 476 | 328 | 2,530 | 640 | 3,820 | 713 | 140 | 735 |
| 21 | 434 | 763 | e630 | e740 | 522 | 341 | 3,910 | 522 | 1,730 | 576 | 138 | 568 |
| 22 | 444 | 866 | e770 | e720 | 504 | 403 | 3,280 | 643 | 1,680 | 515 | 123 | 403 |
| 23 | 275 | 979 | e1,090 | e625 | 461 | 487 | 2,950 | 1,310 | 1,400 | 268 | 119 | 356 |
| 24 | 398 | 777 | e9,940 | e630 | 415 | 502 | 6,190 | 1,470 | 1,150 | 373 | 126 | 281 |
| 25 | 430 | 1,480 | e5,650 | e620 | 430 | 609 | 5,660 | 1,310 | 456 | 357 | 128 | 255 |
| 26 | 274 | 4,620 | e2,550 | e595 | 425 | 670 | 4,640 | 929 | 534 | 257 | 123 | 351 |
| 27 | 253 | 2,800 | e1,520 | e550 | 382 | 821 | 3,150 | 922 | 517 | 910 | 115 | 779 |
| 28 | 262 | 1,910 | e1,300 | e500 | 365 | e1,050 | 3,350 | 1,380 | 389 | 1,630 | 114 | 1,100 |
| 29 | 253 | 3,400 | e1,350 | e475 | --- | e1,690 | 9,020 | 1,500 | 381 | 1,140 | 109 | 564 |
| 30 | 365 | 3,000 | e1,260 | e475 | --- | e3,500 | 8,300 | 1,440 | 427 | 395 | 103 | 983 |
| 31 | 349 | --- | e1,150 | e460 | --- | e5,000 | --- | 1,650 | --- | 369 | 499 | --- |
| TOTAL | 11,124 | 41,511 | 69,530 | 38,085 | 13,078 | 23,062 | 187,360 | 48,005 | 51,177 | 23,785 | 5,637 | 16,215 |
| MEAN | 359 | 1,384 | 2,243 | 1,229 | 467 | 744 | 6,245 | 1,549 | 1,706 | 767 | 182 | 540 |
| MAX | 708 | 4,620 | 9,940 | 4,180 | 699 | 5,000 | 15,900 | 7,050 | 7,880 | 4,920 | 499 | 2,410 |
| MIN | 189 | 448 | 630 | 460 | 350 | 298 | 1,990 | 522 | 276 | 234 | 103 | 133 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

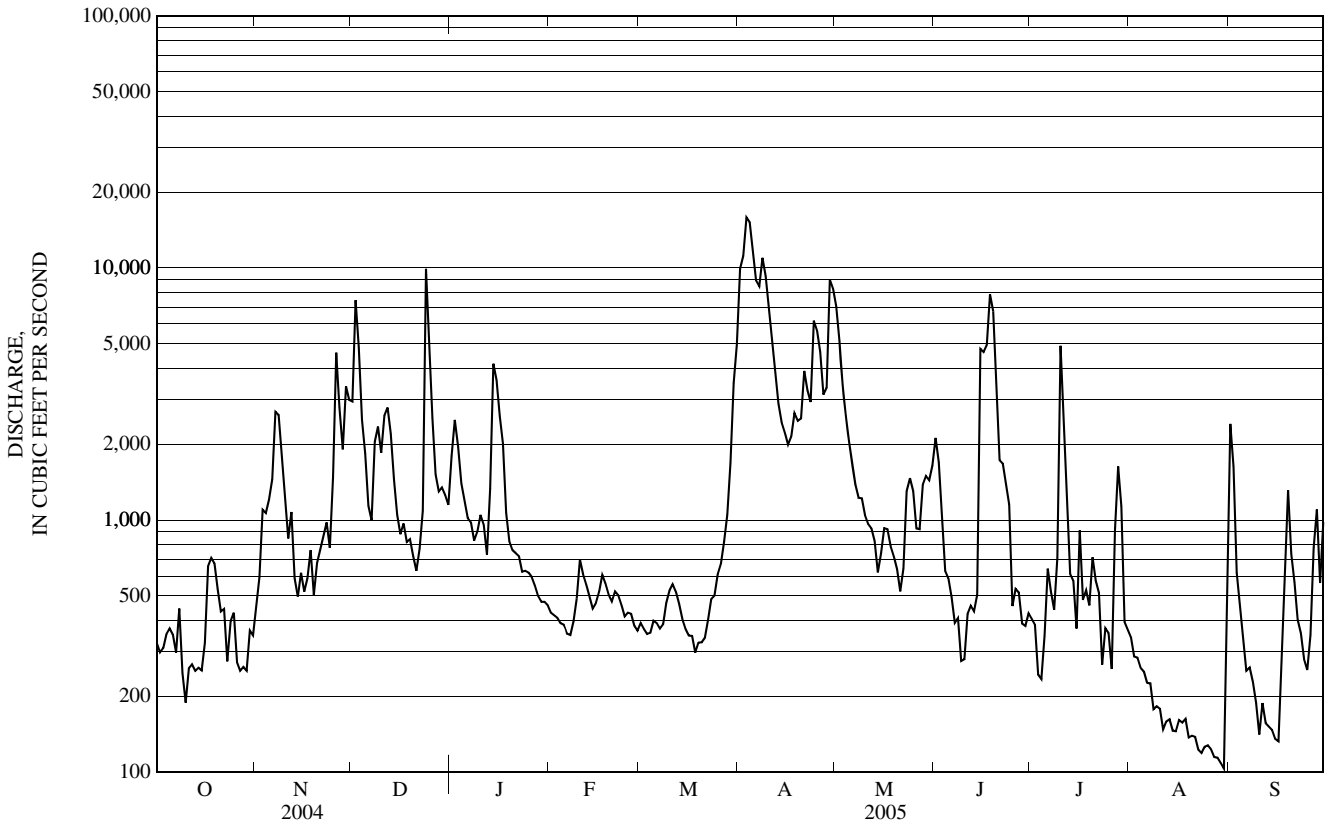
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1,388 | 1,904 | 1,620 | 1,448 | 850 | 2,662 | 4,873 | 1,982 | 1,250 | 892 | 705 | 679 |
| MAX | 2,913 | 3,765 | 3,894 | 4,324 | 1,670 | 5,220 | 7,078 | 3,920 | 5,243 | 2,042 | 2,963 | 2,258 |
| (WY) | (2004) | (2004) | (1997) | (1998) | (1996) | (2000) | (1993) | (2000) | (2002) | (1997) | (2004) | (2004) |
| MIN | 295 | 745 | 596 | 429 | 317 | 676 | 1,527 | 629 | 363 | 148 | 182 | 165 |
| (WY) | (1995) | (2002) | (1993) | (1994) | (1993) | (2001) | (1995) | (1998) | (1999) | (1991) | (2005) | (1995) |

ST. LAWRENCE RIVER BASIN

04294000 MISSISQUOI RIVER AT SWANTON, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1990 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 733,867 | | 528,569 | | 1,680 | |
| ANNUAL MEAN | 2,005 | | 1,448 | | 1,137 | |
| HIGHEST ANNUAL MEAN | | | | | 2,501 | |
| LOWEST ANNUAL MEAN | | | | | 1,137 | |
| HIGHEST DAILY MEAN | 15,400 | Aug 31 | 15,900 | Apr 3 | 29,500 | Jan 9, 1998 |
| LOWEST DAILY MEAN | 189 | Oct 10 | 103 | Aug 30 | 33 | Sep 7, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 247 | Oct 9 | 117 | Aug 24 | 70 | Sep 2, 1999 |
| MAXIMUM PEAK FLOW | | | 17,400 | Apr 4 | 37,700 | Jan 20, 1996 |
| MAXIMUM PEAK STAGE | | | 5.93 | Apr 4 | 9.50 | Jan 20, 1996 |
| 10 PERCENT EXCEEDS | 4,840 | | 3,460 | | 4,170 | |
| 50 PERCENT EXCEEDS | 1,090 | | 613 | | 800 | |
| 90 PERCENT EXCEEDS | 375 | | 240 | | 231 | |

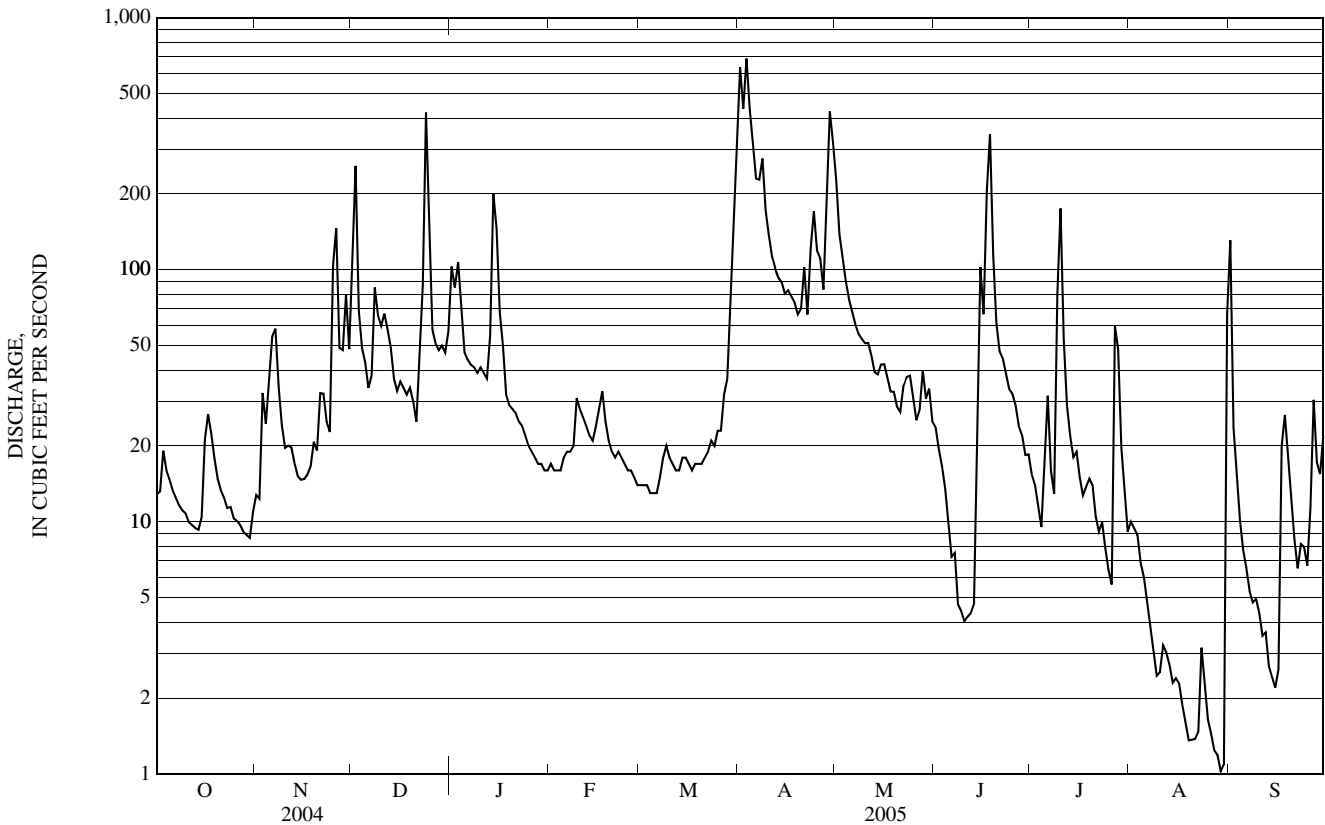
e Estimated



04294300 PIKE RIVER AT EAST FRANKLIN, NEAR ENOSBURG FALLS, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 2001 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 27,005.9 | | 17,386.2 | | 58.1 | |
| ANNUAL MEAN | 73.8 | | 47.6 | | 91.8 | |
| HIGHEST ANNUAL MEAN | | | | | 2004 | |
| LOWEST ANNUAL MEAN | | | | | 2003 | |
| HIGHEST DAILY MEAN | 1,220 | Mar 27 | e 688 | Apr 3 | 1,300 | Jun 12, 2002 |
| LOWEST DAILY MEAN | 5.7 | Jul 5 | 1.0 | Aug 29 | 0.52 | Aug 16, 2001 |
| ANNUAL SEVEN-DAY MINIMUM | 7.9 | Jul 1 | 1.4 | Aug 24 | 0.69 | Aug 13, 2001 |
| MAXIMUM PEAK FLOW | | | 899 | Apr 3 | 2,120 | Jun 12, 2002 |
| MAXIMUM PEAK STAGE | | | ab 4.26 | Apr 1 | 5.91 | Jun 12, 2002 |
| INSTANTANEOUS LOW FLOW | | | 0.70 | Aug 29 | 0.42 | Aug 16, 2001 |
| ANNUAL RUNOFF (CF5M) | 2.14 | | 1.38 | | 1.68 | |
| ANNUAL RUNOFF (INCHES) | 29.12 | | 18.75 | | 22.87 | |
| 10 PERCENT EXCEEDS | 156 | | 105 | | 132 | |
| 50 PERCENT EXCEEDS | 42 | | 21 | | 30 | |
| 90 PERCENT EXCEEDS | 12 | | 4.7 | | 6.0 | |

a Ice jam.
 b Also occurred on Apr. 3.
 c Estimated



04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION (REVISED).--Lat 44° 28'34", long 73° 13'19", Chittenden County, Hydrologic Unit 02010003, 10 ft north of southwest pier corner, at ECHO at the Leahy Center, 0.2 mi west of Battery Street (VT 127) and College Street intersection, 0.2 mi north of Ferry Terminal pier at west end of King Street, 0.2 mi northwest of King Street and Battery Street intersection, 0.4 mi west of Main Street (VT 127) and Church Street intersection in Burlington. Prior to Jan. 13, 2005, at site 0.5 mi north.

PERIOD OF RECORD.--May 1907 to current year (daily gage heights prior to October 2000, elevations thereafter).

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.2 mi south. July 20, 1937 to September 7, 1939, nonrecording gage at site 0.4 mi north. September 7, 1939 to January 13, 2005, gage at site 0.5 mi north. Prior to October 2000, datum 92.86 ft higher.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 101.86 ft, April 27, 1993; minimum observed, 92.61 ft, December 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 99.58 ft, May 2; minimum elevation, 94.60 ft, Nov. 23, 24.

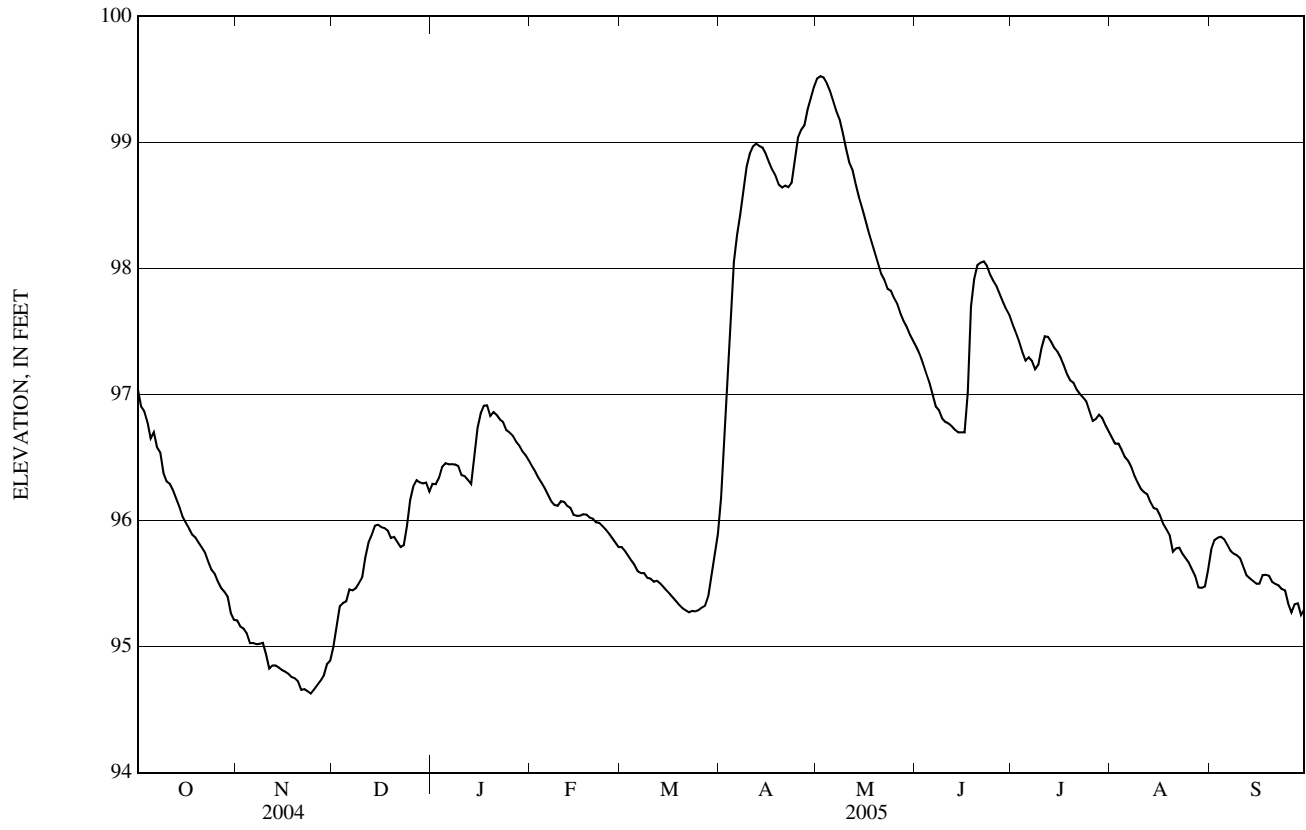
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------|--------|------------|-----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 97.04 | 95.21 | 95.00 | 96.29 | 96.43 | 95.79 | 96.18 | 99.51 | 97.37 | 97.56 | 96.66 | 95.77 |
| 2 | 96.91 | 95.16 | 95.16 | 96.29 | 96.39 | 95.76 | 96.60 | 99.53 | 97.32 | 97.49 | 96.61 | 95.85 |
| 3 | 96.87 | 95.14 | 95.32 | 96.34 | 96.34 | 95.72 | 97.10 | 99.51 | 97.25 | 97.42 | 96.61 | 95.86 |
| 4 | 96.78 | 95.10 | 95.35 | 96.43 | 96.30 | 95.68 | 97.64 | 99.47 | 97.17 | 97.34 | 96.56 | 95.87 |
| 5 | e96.65 | 95.03 | 95.36 | 96.46 | 96.26 | 95.65 | 98.05 | 99.41 | 97.10 | 97.27 | 96.50 | 95.85 |
| 6 | e96.70 | 95.03 | 95.45 | 96.45 | 96.21 | 95.60 | 98.27 | 99.33 | 97.00 | 97.29 | 96.47 | 95.81 |
| 7 | e96.58 | 95.02 | 95.45 | 96.45 | 96.15 | 95.58 | 98.43 | 99.25 | 96.91 | 97.27 | 96.43 | 95.76 |
| 8 | e96.54 | 95.02 | 95.46 | 96.44 | 96.12 | 95.58 | 98.62 | 99.18 | 96.88 | 97.20 | 96.36 | 95.74 |
| 9 | 96.38 | 95.03 | 95.50 | 96.43 | 96.12 | 95.55 | 98.81 | 99.07 | 96.81 | 97.24 | 96.30 | 95.72 |
| 10 | 96.31 | 94.94 | 95.55 | 96.36 | 96.15 | 95.54 | 98.91 | 98.95 | 96.78 | 97.37 | 96.25 | 95.70 |
| 11 | 96.29 | 94.83 | 95.71 | 96.35 | 96.15 | 95.52 | 98.97 | 98.84 | 96.77 | 97.46 | 96.23 | 95.63 |
| 12 | 96.24 | 94.85 | 95.83 | 96.32 | 96.12 | 95.52 | 98.99 | 98.78 | 96.75 | 97.46 | 96.21 | 95.56 |
| 13 | 96.17 | 94.85 | 95.89 | 96.29 | 96.10 | 95.50 | 98.97 | 98.67 | 96.72 | 97.42 | 96.15 | 95.54 |
| 14 | 96.11 | 94.83 | 95.96 | 96.51 | 96.04 | 95.47 | 98.96 | 98.57 | 96.70 | 97.37 | 96.10 | 95.52 |
| 15 | 96.03 | 94.81 | 95.97 | 96.74 | 96.04 | 95.44 | 98.91 | 98.48 | 96.70 | 97.34 | 96.09 | 95.50 |
| 16 | 95.98 | 94.80 | 95.95 | 96.85 | 96.04 | 95.42 | 98.84 | 98.39 | 96.70 | 97.29 | 96.04 | 95.50 |
| 17 | 95.94 | 94.78 | 95.94 | 96.91 | 96.05 | 95.39 | 98.78 | 98.30 | 97.02 | 97.23 | 95.97 | 95.57 |
| 18 | 95.89 | 94.76 | 95.92 | 96.91 | 96.05 | 95.36 | 98.74 | 98.21 | 97.70 | 97.16 | 95.93 | 95.57 |
| 19 | 95.86 | 94.75 | 95.86 | 96.83 | 96.02 | 95.33 | 98.66 | 98.13 | 97.92 | 97.11 | 95.88 | 95.56 |
| 20 | 95.82 | 94.73 | 95.87 | 96.86 | 96.01 | 95.30 | 98.64 | 98.04 | 98.03 | 97.09 | 95.75 | 95.51 |
| 21 | 95.79 | 94.66 | 95.83 | 96.84 | 95.99 | 95.29 | 98.66 | 97.96 | 98.04 | 97.04 | 95.78 | 95.50 |
| 22 | 95.75 | 94.66 | 95.79 | 96.80 | 95.98 | 95.27 | 98.64 | 97.91 | 98.06 | 97.00 | 95.79 | 95.48 |
| 23 | 95.67 | 94.65 | 95.81 | 96.78 | 95.96 | 95.28 | 98.68 | 97.84 | 98.02 | 96.98 | 95.74 | 95.46 |
| 24 | 95.61 | 94.63 | 95.96 | 96.72 | 95.93 | 95.28 | 98.85 | 97.82 | 97.95 | 96.94 | 95.70 | 95.45 |
| 25 | 95.58 | 94.66 | 96.16 | 96.70 | 95.90 | 95.29 | 99.04 | 97.76 | 97.90 | 96.87 | 95.66 | 95.34 |
| 26 | 95.51 | 94.69 | 96.27 | 96.67 | 95.86 | 95.31 | 99.10 | 97.72 | 97.86 | 96.79 | 95.61 | 95.27 |
| 27 | 95.46 | 94.73 | 96.32 | 96.63 | 95.83 | 95.32 | 99.14 | 97.64 | 97.80 | 96.81 | 95.56 | 95.34 |
| 28 | 95.44 | 94.77 | 96.30 | 96.60 | 95.79 | 95.40 | 99.26 | 97.58 | 97.73 | 96.84 | 95.47 | 95.34 |
| 29 | 95.40 | 94.86 | 96.29 | 96.55 | --- | 95.56 | 99.35 | 97.53 | 97.67 | 96.81 | 95.47 | 95.25 |
| 30 | 95.27 | 94.89 | 96.30 | 96.52 | --- | 95.72 | 99.44 | 97.47 | 97.63 | 96.76 | 95.48 | 95.30 |
| 31 | 95.21 | --- | 96.23 | 96.48 | --- | 95.89 | --- | 97.42 | --- | 96.71 | 95.61 | --- |
| MEAN | 96.06 | 94.86 | 95.80 | 96.57 | 96.08 | 95.49 | 98.57 | 98.46 | 97.34 | 97.16 | 96.03 | 95.57 |
| MAX | 97.04 | 95.21 | 96.32 | 96.91 | 96.43 | 95.89 | 99.44 | 99.53 | 98.06 | 97.56 | 96.66 | 95.87 |
| MIN | 95.21 | 94.63 | 95.00 | 96.29 | 95.79 | 95.27 | 96.18 | 97.42 | 96.70 | 96.71 | 95.47 | 95.25 |
| CAL YR | 2004 | MEAN 96.84 | MAX 99.43 | MIN 94.63 | | | | | | | | |
| WTR YR | 2005 | MEAN 96.50 | MAX 99.53 | MIN 94.63 | | | | | | | | |

e Estimated

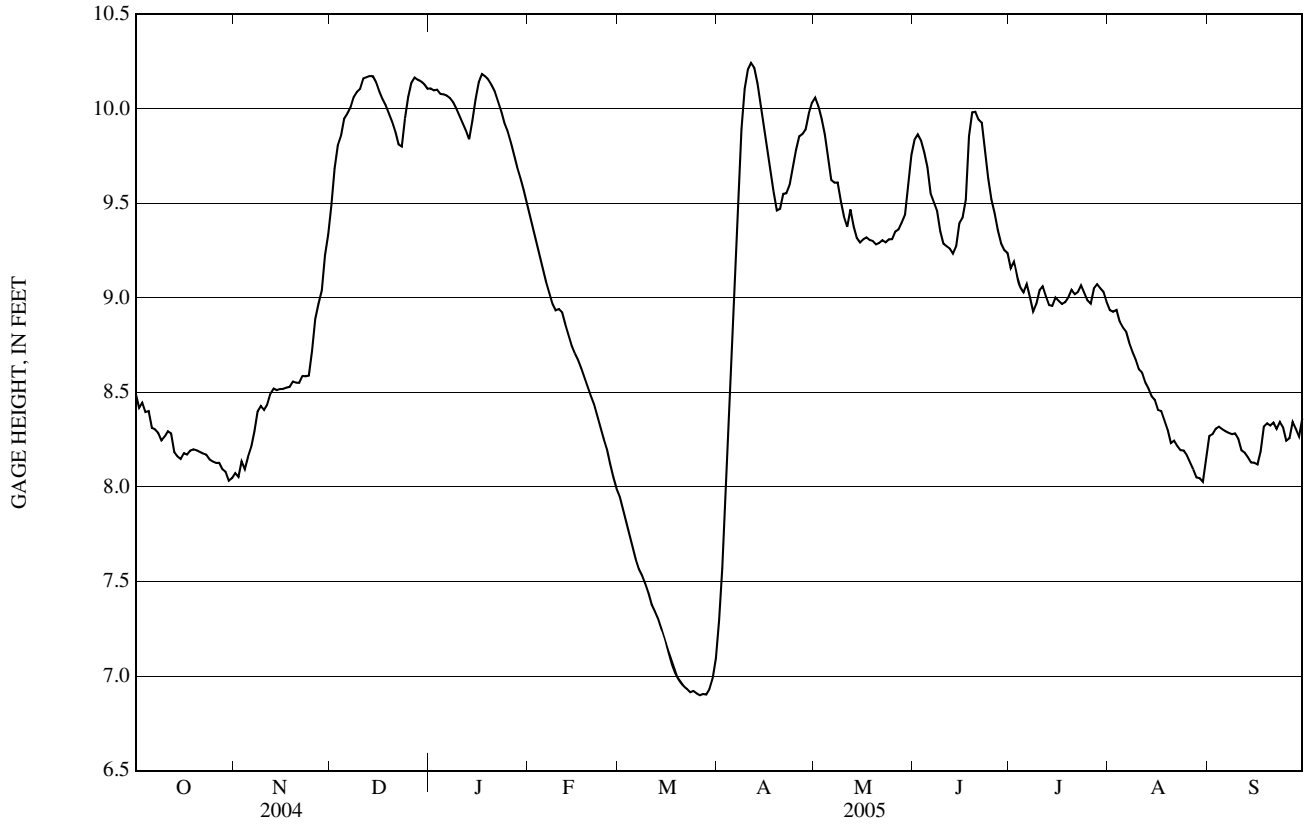
ST. LAWRENCE RIVER BASIN

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT—Continued



ST. LAWRENCE RIVER BASIN

04295500 LAKE MEMPHREMAGOG AT NEWPORT, VT—Continued



04296000 BLACK RIVER AT COVENTRY, VT

LOCATION.--Lat 44° 52'08", long 72° 16'14", Orleans County, Hydrologic Unit 01110000, on right bank, 15 ft downstream from Loop Road bridge, 800 ft upstream from Stony Brook, 0.3 mi northwest of Loop Road and Main Street intersection in Coventry, and 4.6 mi north of State Highways 14 and 58 interaction in Irasburg.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--Discharge records: October 1951 to current year.

PERIOD OF DAILY WATER-QUALITY RECORD.--Water years 1978 to 1981.

SPECIFIC CONDUCTANCE: November 1977 to March 1979, May and June 1979, and December 1980 to July 1981.

WATER TEMPERATURE: November and December 1977, June to August 1978, May and June 1979, October 1979 to March 1980, May to September 1980, and December 1980 to July 1981.

GAGE.--Water-stage recorder. Elevation of gage is 710 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional diurnal fluctuation at low flow by mill upstream prior to 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|-------|------|-----------------------------------|---------------------|
| Apr 3 | 2300 | *1,830 | *6.17 | Apr 7 | 2215 | 1,720 | 6.04 |

Minimum discharge, 29 ft³/s, Sept. 15, gage height, 1.60 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | 64 | 78 | 405 | e265 | e74 | e64 | 1,030 | 636 | 386 | 81 | 53 | 370 |
| 2 | 62 | 83 | 639 | e325 | e74 | e68 | 1,050 | 489 | 264 | 84 | 51 | 197 |
| 3 | 64 | 128 | 480 | e255 | e73 | e66 | 1,480 | 421 | 193 | 75 | 60 | 98 |
| 4 | 64 | 145 | 347 | e225 | e72 | e65 | 1,700 | 343 | 150 | 73 | 59 | 68 |
| 5 | 61 | 158 | e245 | e185 | e76 | e65 | 1,560 | 283 | 126 | 69 | 55 | 55 |
| 6 | 58 | 231 | e220 | e160 | e76 | e65 | 1,350 | 243 | 109 | 80 | 51 | 47 |
| 7 | 57 | 334 | e240 | e155 | e79 | e66 | 1,430 | 214 | 98 | 70 | 46 | 42 |
| 8 | 56 | 297 | 263 | e140 | e88 | e82 | 1,620 | 200 | 88 | 70 | 42 | 39 |
| 9 | 55 | 199 | 286 | e140 | e138 | e76 | 1,290 | 185 | 85 | 163 | 39 | 38 |
| 10 | 54 | 135 | 238 | e145 | e120 | e69 | 1,070 | 168 | 106 | 296 | 37 | 36 |
| 11 | 53 | 112 | 243 | e140 | e100 | e66 | 903 | 154 | 157 | 181 | 36 | 34 |
| 12 | 53 | 105 | 292 | e135 | e94 | e66 | 707 | 154 | 122 | 107 | 37 | 33 |
| 13 | 53 | 101 | 257 | e145 | e87 | e65 | 538 | 142 | 103 | 80 | 37 | 32 |
| 14 | 52 | 103 | e195 | e460 | e84 | e66 | 475 | 129 | 152 | 71 | 36 | 31 |
| 15 | 51 | 80 | e146 | e400 | e89 | e66 | 416 | 140 | 315 | 94 | 40 | 32 |
| 16 | 71 | 79 | e140 | e320 | e98 | e67 | 378 | 184 | 298 | 81 | 39 | 33 |
| 17 | 112 | 80 | e142 | e235 | e107 | e68 | 384 | 203 | 464 | 117 | 37 | 46 |
| 18 | 112 | 81 | e135 | e180 | e100 | e69 | 399 | 177 | 988 | 106 | 34 | 111 |
| 19 | 96 | 86 | e125 | e135 | e87 | e71 | 362 | 152 | 599 | 81 | 32 | 78 |
| 20 | 80 | 87 | e115 | e110 | e79 | e71 | 354 | 134 | 347 | 94 | 31 | 62 |
| 21 | 71 | 95 | e102 | e100 | e71 | e72 | 489 | 119 | 215 | 70 | 32 | 52 |
| 22 | 65 | 122 | e106 | e94 | e73 | e75 | 394 | 165 | 207 | 60 | 35 | 46 |
| 23 | 62 | 119 | e230 | e89 | e74 | e76 | 532 | 235 | 159 | 58 | 36 | 42 |
| 24 | 64 | 104 | 898 | e89 | e74 | e76 | 730 | 280 | 127 | 53 | 38 | 41 |
| 25 | 66 | 346 | 611 | e87 | e73 | e77 | 715 | 222 | 106 | 49 | 37 | 39 |
| 26 | 62 | 587 | e515 | e85 | e70 | e81 | 631 | 176 | 92 | 46 | 34 | 58 |
| 27 | 63 | 348 | e365 | e83 | e66 | e89 | 490 | 208 | 87 | 73 | 32 | 333 |
| 28 | 59 | 268 | e345 | e80 | e62 | e130 | 646 | 228 | 89 | 183 | 32 | 169 |
| 29 | 55 | 498 | e290 | e77 | --- | e220 | 784 | 200 | 107 | 115 | 32 | 100 |
| 30 | 53 | 364 | e250 | e76 | --- | e365 | 646 | 278 | 118 | 76 | 34 | 103 |
| 31 | 61 | --- | e215 | e77 | --- | 614 | --- | 447 | --- | 60 | 120 | --- |
| TOTAL | 2,009 | 5,553 | 9,080 | 5,192 | 2,358 | 3,236 | 24,553 | 7,309 | 6,457 | 2,916 | 1,314 | 2,465 |
| MEAN | 64.8 | 185 | 293 | 167 | 84.2 | 104 | 818 | 236 | 215 | 94.1 | 42.4 | 82.2 |
| MAX | 112 | 587 | 898 | 460 | 138 | 614 | 1,700 | 636 | 988 | 296 | 120 | 370 |
| MIN | 51 | 78 | 102 | 76 | 62 | 64 | 354 | 119 | 85 | 46 | 31 | 31 |
| CFSM | 0.53 | 1.52 | 2.40 | 1.37 | 0.69 | 0.86 | 6.71 | 1.93 | 1.76 | 0.77 | 0.35 | 0.67 |
| IN. | 0.61 | 1.69 | 2.77 | 1.58 | 0.72 | 0.99 | 7.49 | 2.23 | 1.97 | 0.89 | 0.40 | 0.75 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2005, BY WATER YEAR (WY)

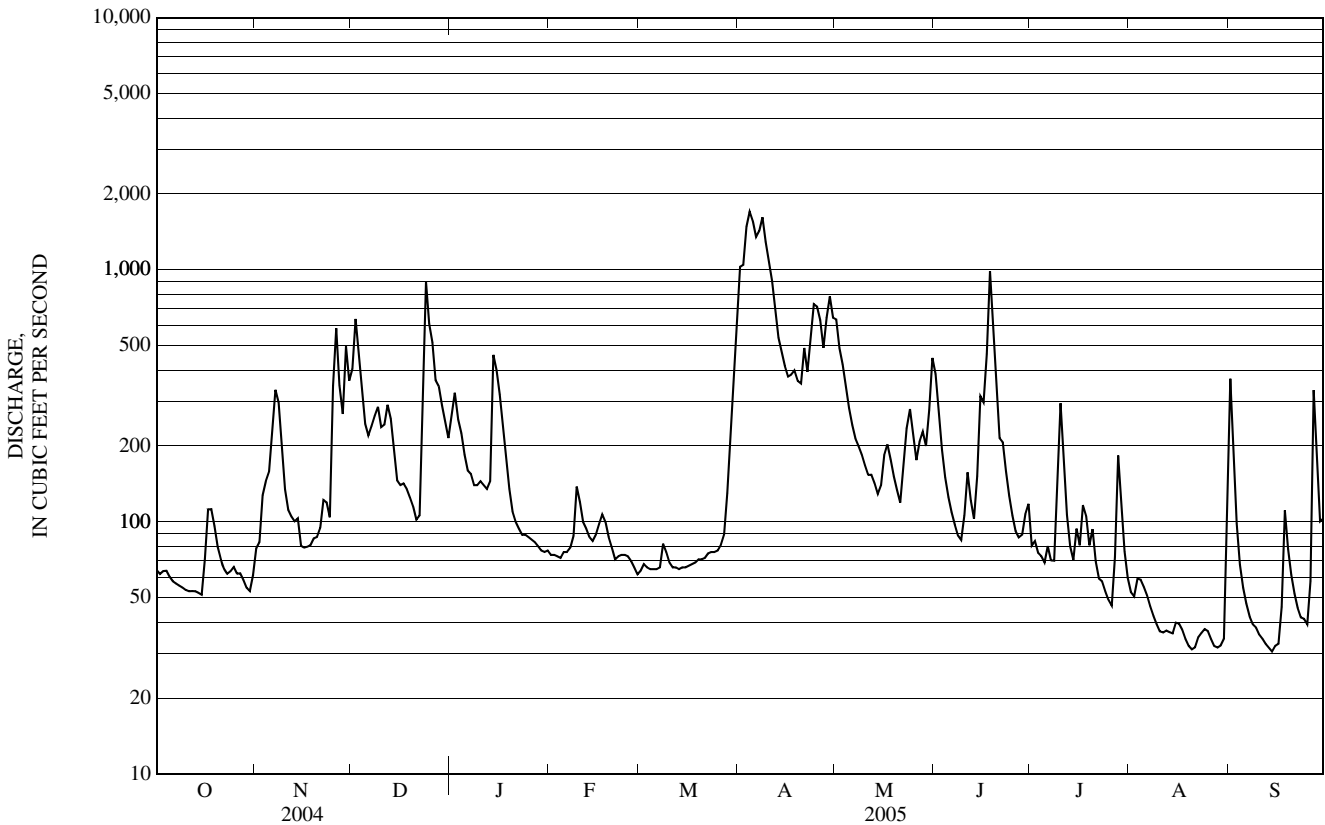
| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 150 | 200 | 182 | 129 | 119 | 277 | 654 | 280 | 155 | 103 | 92.4 | 92.8 |
| MAX | 512 | 503 | 473 | 426 | 534 | 611 | 1,164 | 709 | 654 | 405 | 334 | 280 |
| (WY) | (1991) | (2004) | (1984) | (1998) | (1981) | (1976) | (1969) | (1972) | (2002) | (1973) | (1976) | (1977) |
| MIN | 28.4 | 54.6 | 58.1 | 43.4 | 29.1 | 63.1 | 196 | 90.5 | 43.9 | 29.1 | 23.9 | 19.9 |
| (WY) | (1954) | (1979) | (1979) | (1954) | (1980) | (1956) | (1995) | (1987) | (1988) | (1991) | (2001) | (1953) |

ST. LAWRENCE RIVER BASIN

04296000 BLACK RIVER AT COVENTRY, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1952 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 87,686 | | 72,442 | | 203 | |
| ANNUAL MEAN | 240 | | 198 | | 113 | |
| HIGHEST ANNUAL MEAN | | | | | 302 | 2004 |
| LOWEST ANNUAL MEAN | | | | | 113 | 1965 |
| HIGHEST DAILY MEAN | 1,890 | Aug 31 | 1,700 | Apr 4 | 3,300 | Apr 2, 1976 |
| LOWEST DAILY MEAN | 50 | Jul 5 | a 31 | Aug 20 | b 11 | Aug 29, 1953 |
| ANNUAL SEVEN-DAY MINIMUM | 53 | Oct 9 | 33 | Sep 10 | 11 | Aug 28, 1953 |
| MAXIMUM PEAK FLOW | | | 1,830 | Apr 3 | 3,740 | Apr 2, 1976 |
| MAXIMUM PEAK STAGE | | | 6.17 | Apr 3 | 7.91 | Apr 2, 1976 |
| INSTANTANEOUS LOW FLOW | | | 29 | Sep 15 | b 11 | Aug 29, 1953 |
| ANNUAL RUNOFF (CF5M) | 1.96 | | 1.63 | | 1.66 | |
| ANNUAL RUNOFF (INCHES) | 26.74 | | 22.09 | | 22.57 | |
| 10 PERCENT EXCEEDS | 500 | | 462 | | 475 | |
| 50 PERCENT EXCEEDS | 150 | | 100 | | 106 | |
| 90 PERCENT EXCEEDS | 71 | | 44 | | 41 | |

a Also occurred on Sept. 14.
 b Also occurred Aug. 30 to Sept. 1, 1953.
 c Estimated



04296500 CLYDE RIVER AT NEWPORT, VT

LOCATION.--Lat 44° 56'25", long 72° 11'23", Orleans County, Hydrologic Unit 01110000, on right bank, 100 ft upstream of small right-bank tributary, 600 ft upstream of Clyde Street bridge, 0.8 mi east of US 5 and Main Street intersection in Newport, 0.9 mi downstream of Clyde Pond Dam, and 0.9 mi upstream of mouth.

DRAINAGE AREA.--142 mi².

PERIOD OF RECORD.--Discharge records: May 1909 to December 1911, April 1912 to September 1919; May 1920 to August 1922, October 1922 to September 1924, November 1928 to May 1936, September 1938 to current year. Prior to November 1928, published as "at West Derby."

PERIOD OF DAILY WATER-QUALITY RECORD.--Water years 1975 to 1978.

SPECIFIC CONDUCTANCE: October 1974 to October 1977.

WATER TEMPERATURE: October 1974 to October 1977.

REVISED RECORDS.--WSP 744: 1913(M), drainage area. WSP 924: 1940. WSP 1307: 1913-15(M).

GAGE.--Water-stage recorder. Datum of gage is 682.36 ft above National Geodetic Vertical Datum of 1929. May 25, 1909 to September 20, 1915, nonrecording gage, and September 21, 1915 to September 30, 1924, November 16, 1928 to May 4, 1936, water-stage recorder, at site 0.65 mi upstream at different datum. March 6, 1957 to May 11, 1994, water-stage recorder and records of power generation. No instantaneous peak stage available for period of March 6, 1957 to May 11, 1994, due to diversion of flow around station through canal and penstock of Newport No. 11 power plant.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by power plant and reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,900 ft³/s, March 20, 1936, gage height, 5.76 ft, site and datum then in use; maximum daily, 3,610 ft³/s, March 20, 1936; minimum daily discharge, 2.6 ft³/s, June 18, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft³/s, Apr. 9, 10, gage height, 6.43 ft; minimum daily discharge, e47 ft³/s, Mar. 8.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|
| 1 | 105 | 68 | 432 | e305 | e120 | 115 | e350 | 824 | 628 | 240 | 130 | 108 |
| 2 | 102 | 85 | 451 | 292 | e113 | 115 | e455 | 800 | 579 | 209 | 134 | 165 |
| 3 | 128 | 115 | 458 | 292 | 106 | e123 | e675 | 763 | 538 | 185 | 138 | 203 |
| 4 | 131 | 120 | 453 | 279 | 92 | e160 | e980 | 707 | 489 | 163 | 131 | 221 |
| 5 | 104 | 141 | 438 | 258 | 93 | e108 | e1,050 | 642 | 447 | 202 | 131 | 217 |
| 6 | 77 | 139 | 415 | e262 | 95 | 70 | 1,120 | 581 | 379 | 216 | 132 | 199 |
| 7 | 59 | 190 | 338 | 240 | 105 | e55 | 1,130 | 531 | 317 | 155 | 132 | 158 |
| 8 | 69 | 207 | 326 | 211 | 111 | e47 | 1,180 | 493 | 291 | 130 | 127 | 159 |
| 9 | 75 | 235 | 321 | 197 | 153 | e118 | 1,230 | 456 | 262 | 194 | 120 | 121 |
| 10 | 74 | 250 | 293 | 170 | 145 | e210 | 1,230 | 412 | 249 | 214 | 113 | 100 |
| 11 | 71 | 229 | 298 | 189 | 122 | e329 | 1,140 | 388 | 223 | 148 | 109 | 100 |
| 12 | 70 | 221 | 308 | e172 | 108 | e195 | 1,010 | 366 | 206 | 220 | 102 | 90 |
| 13 | 77 | 209 | 284 | e170 | e112 | 129 | 919 | 317 | 164 | 246 | 86 | 96 |
| 14 | 102 | 163 | e252 | e315 | e220 | 116 | 835 | 296 | 188 | 236 | 75 | 91 |
| 15 | 103 | 143 | e258 | 371 | 205 | 97 | 748 | 289 | 255 | 217 | 71 | 79 |
| 16 | 112 | 152 | e245 | 366 | 148 | e75 | 678 | 283 | 322 | 196 | 67 | 78 |
| 17 | 112 | 149 | 240 | 339 | 128 | e55 | 627 | 289 | 433 | 160 | 64 | 112 |
| 18 | 100 | 135 | 183 | e330 | e148 | e85 | 600 | 298 | 590 | 139 | 60 | 110 |
| 19 | 69 | 126 | e159 | e288 | e165 | e88 | 591 | 289 | 625 | 170 | 59 | 84 |
| 20 | 90 | 137 | e182 | e255 | e195 | e102 | 614 | 258 | 632 | 136 | 57 | 76 |
| 21 | 123 | 126 | e170 | e305 | 189 | e108 | 684 | 258 | 609 | 139 | 56 | 101 |
| 22 | 116 | 121 | 142 | e410 | 127 | e110 | 718 | 250 | 579 | 171 | 55 | 101 |
| 23 | 117 | 146 | 155 | e650 | 123 | e127 | 781 | 237 | 522 | 153 | 54 | 78 |
| 24 | 114 | 143 | e356 | e500 | e140 | e137 | 825 | 235 | 469 | 86 | 68 | 78 |
| 25 | 112 | 189 | e363 | e160 | e117 | 111 | 851 | 271 | 437 | 126 | 56 | 78 |
| 26 | 88 | 256 | e312 | e225 | e195 | 96 | 882 | 303 | 382 | 128 | 55 | 67 |
| 27 | 60 | 293 | e340 | e410 | e180 | 95 | 862 | 356 | 280 | 135 | 64 | 70 |
| 28 | 71 | 306 | e357 | e790 | e154 | 126 | 814 | 347 | 287 | 125 | 57 | 117 |
| 29 | 70 | 384 | e315 | e560 | --- | 135 | 848 | 357 | 241 | 114 | 55 | 119 |
| 30 | 69 | 420 | e290 | e125 | --- | 145 | 832 | 576 | 262 | 122 | 53 | 123 |
| 31 | 93 | --- | e262 | e145 | --- | 207 | --- | 663 | --- | 129 | 89 | --- |
| TOTAL | 2,863 | 5,598 | 9,396 | 9,581 | 3,909 | 3,789 | 25,259 | 13,135 | 11,885 | 5,204 | 2,700 | 3,499 |
| MEAN | 92.4 | 187 | 303 | 309 | 140 | 122 | 842 | 424 | 396 | 168 | 87.1 | 117 |
| MAX | 131 | 420 | 458 | 790 | 220 | 329 | 1,230 | 824 | 632 | 246 | 138 | 221 |
| MIN | 59 | 68 | 142 | 125 | 92 | 47 | 350 | 235 | 164 | 86 | 53 | 67 |
| CFSM | 0.65 | 1.31 | 2.13 | 2.18 | 0.98 | 0.86 | 5.93 | 2.98 | 2.79 | 1.18 | 0.61 | 0.82 |
| IN. | 0.75 | 1.47 | 2.46 | 2.51 | 1.02 | 0.99 | 6.62 | 3.44 | 3.11 | 1.36 | 0.71 | 0.92 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909-24, 29-36, 1938-2005, BY WATER YEAR (WY)

| | 1909-24 | 29-36 | 1938-2005 | 1909-24 | 29-36 | 1938-2005 | 1909-24 | 29-36 | 1938-2005 | 1909-24 | 29-36 | 1938-2005 |
|------|---------|--------|-----------|---------|--------|-----------|---------|--------|-----------|---------|--------|-----------|
| MEAN | 177 | 236 | 228 | 191 | 157 | 278 | 696 | 491 | 245 | 149 | 130 | 131 |
| MAX | 576 | 612 | 599 | 503 | 477 | 1,136 | 1,192 | 1,042 | 785 | 464 | 369 | 523 |
| (WY) | (1946) | (2004) | (1984) | (2003) | (1981) | (1936) | (1933) | (1972) | (2002) | (1973) | (1976) | (1924) |
| MIN | 50.7 | 79.5 | 80.4 | 62.9 | 19.1 | 72.8 | 186 | 151 | 74.0 | 47.2 | 39.6 | 41.9 |
| (WY) | (1962) | (1923) | (1923) | (1948) | (1979) | (1911) | (1979) | (1998) | (1988) | (1991) | (1909) | (1984) |

ST. LAWRENCE RIVER BASIN

04296500 CLYDE RIVER AT NEWPORT, VT—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1909-24, 29-36, 38-2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------------------|--------------|
| ANNUAL TOTAL | 98,768 | | 96,818 | | | |
| ANNUAL MEAN | 270 | | 265 | | 258 | |
| HIGHEST ANNUAL MEAN | | | | | 394 | 1974 |
| LOWEST ANNUAL MEAN | | | | | 153 | 1979 |
| HIGHEST DAILY MEAN | 984 | Aug 31 | a 1,230 | Apr 9 | 3,610 | Mar 20, 1936 |
| LOWEST DAILY MEAN | 21 | Jul 7 | e 47 | Mar 8 | 2.6 | Jun 18, 1956 |
| ANNUAL SEVEN-DAY MINIMUM | 48 | Jul 5 | 57 | Aug 20 | 14 | Oct 9, 1961 |
| MAXIMUM PEAK FLOW | | | a 1,260 | Apr 9 | b,c 3,900 | Mar 20, 1936 |
| MAXIMUM PEAK STAGE | | | d 6.54 | Jan 29 | 5.76 | Mar 20, 1936 |
| ANNUAL RUNOFF (CFSM) | 1.90 | | 1.87 | | 1.81 | |
| ANNUAL RUNOFF (INCHES) | 25.87 | | 25.36 | | 24.66 | |
| 10 PERCENT EXCEEDS | 539 | | 618 | | 531 | |
| 50 PERCENT EXCEEDS | 210 | | 171 | | 180 | |
| 90 PERCENT EXCEEDS | 98 | | 76 | | 63 | |

- a Also occurred on April 10.
- b No instantaneous peak stage or discharge available for period of March 6, 1957 to May 11, 1994, as explained above in Remarks.
- c Site and datum then in use.
- d Ice jam.
- e Estimated.

